Annual Report

2005-2006

Private Infrastructure Development Group

PIDG Annual Report 2005/6

Contents

1 Foreword

Infrastructure has long been recognised as an essential element of growth, contributing to improvements in virtually all areas of economic and social development, from trade and industry through to health and education. Nevertheless, access to infrastructure services in developing countries consistently falls far short of requirements. Severe public budget constraints in many low-income countries, combined with the institutional, financial and legal bottlenecks which deter private sector investment, have led to a significant shortfall in the supply of infrastructure. If the Millennium Development Goals (MDGs) are to be achieved this gap needs to be urgently addressed.

The Private Infrastructure Development Group (PIDG) is a multi-donor organisation, conceived to address the shortfall in infrastructure supply in developing countries by harnessing the finance and expertise of the private sector. The PIDG establishes facilities to encourage and support private sector involvement in the infrastructure sector in developing countries, with a requirement that PIDG supported activities must target and benefit the poor in particular.

Since its establishment in 2002, PIDG has launched five facilities to help achieve its objectives, each focused on addressing a particular challenge to private sector involvement in infrastructure provision. Through these facilities, the PIDG has been involved in 53 projects across more than 25 developing countries, with a total investment to date of US$ 227 million. These initiatives have in turn mobilised more than US$2.6 billion in investment from the private sector and Development Finance Institutions (DFIs).

PIDG continues to grow and respond to distinct challenges in the infrastructure market, with several new vehicles under development for 2007. In all of our activities, we endeavour to establish links and relationships with like-minded organisations, and wherever possible collaborate with others to deliver results that will contribute to the success of the MDGs.

John Hodges, PIDG Programme Manager


C.D.P
3503
C.D.P
503
MTN

2 PIDG Background

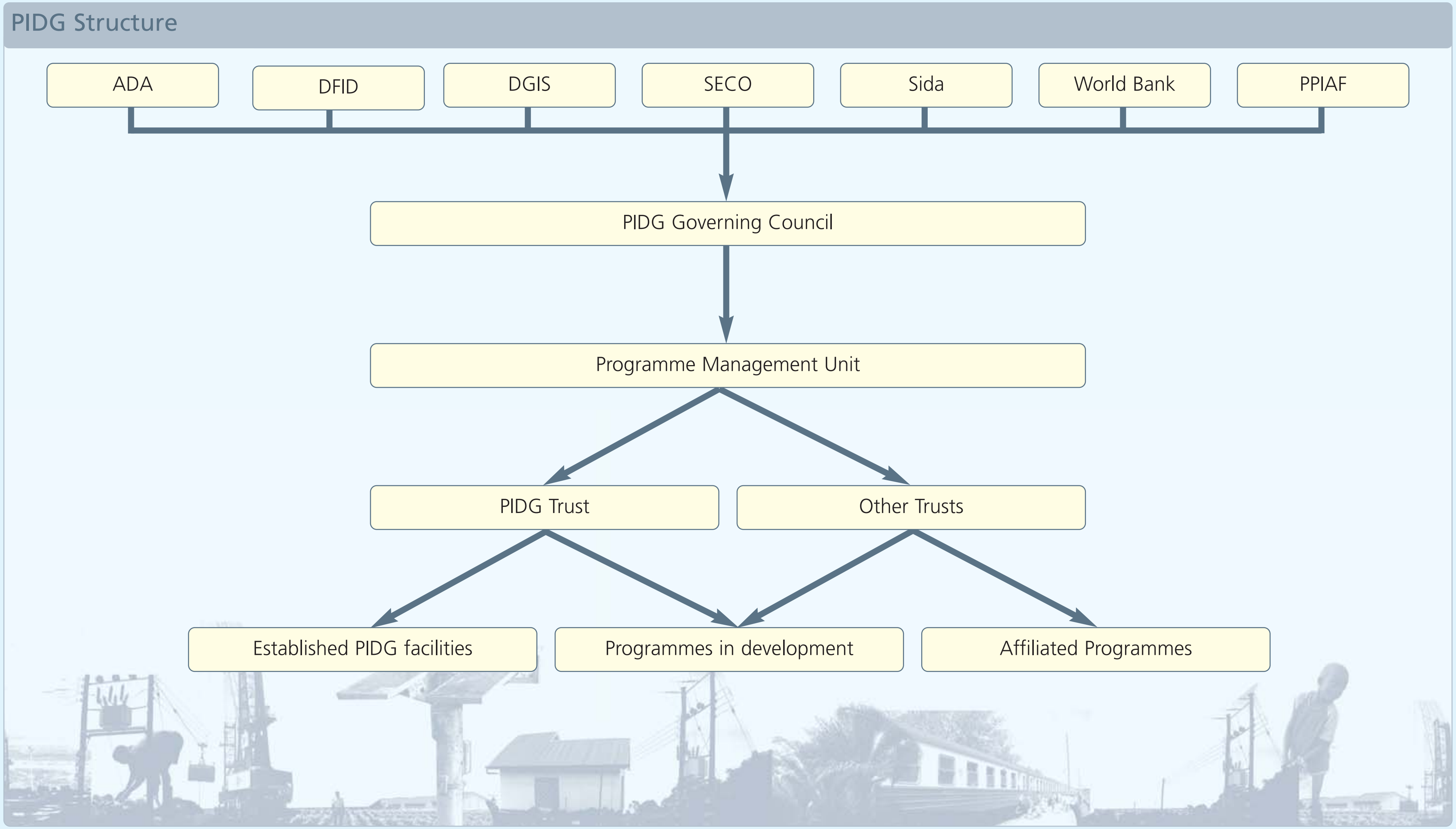
2.1. Introduction

The PIDG is a multi-donor organisation constituted with the dual objectives of encouraging private sector investment in infrastructure in developing countries, and in so doing, contributing to economic growth and poverty alleviation. Its strategy is to engage private sector expertise and efficiency to foster private sector investment in infrastructure, as well as to ensure sustainability, additionality, capacity building and value-for-money in all of its activities. Central to PIDG's activities is the belief that infrastructure is important to sustainable development and the reduction of poverty, and that private sector investment is essential to increase the provision of infrastructure services.

2.2. PIDG structure and governance

Established in 2002, the founding members of the PIDG are the UK Department for International Development (DFID), the Netherlands Ministry of Foreign Affairs (DGIS), the Swiss State Secretariat for Economic Affairs (SECO), the Swedish International Development Cooperation Agency (Sida) and the World Bank. In 2006, PIDG membership expanded to include the Austrian Development Agency (ADA). The Public Private Infrastructure Advisory Facility (PPIAF) is an honorary member.

The PIDG attaches particular importance to the provision of adequate and affordable services to the poorer sections of society and only permits investments in certain eligible infrastructure services. Countries eligible for PIDG support are those found in the first three columns of the Development Assistance Committee (DAC) List of Overseas Development Assistance (ODA) recipients. This list can be found in Annex 1 of this report.



The PIDG operates through a Governing Council, a Programme Management Unit (PMU) and the PIDG Trust. The Governing Council is the decision-making body and consists of a representative of each donor member. As the PIDG is not a legal entity in its own right, it has established a trust – the PIDG Trust – to perform many of its functions. The PIDG members provide grant and loan funding to the PIDG Trust to support PIDG activities. The PMU, which is contracted by the PIDG Trust, manages all PIDG activities and is the central contact point for the group.


MATERIAL: Deli x Ghana
TOTAL SEEDLINGS: 1443
DATE PLANTED: 11-02-05

2.3. How PIDG works

To achieve its dual aims of economic development and poverty alleviation through private sector participation in infrastructure, the PIDG establishes facilities which address market failures in the infrastructure sector, encourage private sector efficiencies and investment, and promote the wider availability of private capital.

By the end of 2006, PIDG had established five facilities to overcome the most pressing constraints on private sector participation in infrastructure provision in developing countries. These facilities are summarised below and described in greater detail in Chapter 4 of the report.

- The **Emerging Africa Infrastructure Fund Limited (EAIF)** is a long-term debt fund which addresses the insufficient availability of long-term foreign exchange debt in sub-Saharan Africa, with the objective of increasing offshore private capital flows into infrastructure projects in the region.
- **GuarantCo Limited (GuarantCo)** provides local currency guarantees to infrastructure projects in low-income countries in order to mitigate credit risks for local lenders. Its objectives are to promote domestic financing of infrastructure projects and, in so doing, to help develop local capital markets.
- **InfraCo Limited (InfraCo)** is an infrastructure project development company designed to assume the risks and costs of early stage project development in areas where many traditional developers have retreated. InfraCo takes challenging infrastructure projects from the concept stage through to financial close and sale to private investors.
- **The Technical Assistance Facility (TAF)** was established by the PIDG to provide grant funds for project development and local capacity building support in association with other PIDG vehicles.
- **DevCo** provides advisory services to governments in their preparation and development of infrastructure projects to attract private sector investment.

Constraint to private sector participation in infrastructure	PIDG Facilities /Affiliated Programme
Limited availability of foreign US$ debt in sub-Saharan Africa	EAIF
High credit risk for local currency lending	GuarantCo
Limited interest in early stage risks and costs of infrastructure project development	InfraCo
Lack of local capacity to interact effectively with PIDG vehicles	TAF
Lack of governmental expertise in project development and attracting private sector participation into infrastructure	DevCo[1]
Affordability of user tariffs for low-income households in private infrastructure projects	GPOBA[1]
High risks of servicing hard currency debts when revenues are in local currency facing potential devaluation	CLF[2]
Lack of access to equity for greenfield infrastructure projects in more challenging sectors in poorer South and South East Asian countries	AsPIFF[2]

(Although officially designated as an Affiliated Programme, DevCo operates under the oversight of the PIDG Governing Council, is 100% funded by the PIDG, and is therefore analogous to the other PIDG Facilities for operational purposes).

The PIDG also seeks to develop collaborative relationships with other programmes that focus on the private provision of infrastructure services for poorer sectors of society and has also designated GPOBA (see below) as an Affiliated Programme.

- **The Global Partnership for Output Based Aid (GPOBA)** seeks to encourage the use of output-based aid approaches to the delivery of infrastructure, linking subsidy payments to service providers with the actual delivery of 'outputs' to customers.

Two further PIDG programmes are in development and are expected to be launched in 2007:

- The **Currency Liquidity Facility (CLF)** will address difficulties associated with currency devaluation for investors who receive their project revenues in a local currency, but service their debt repayments in hard foreign currency (US$, €, etc). The facility will work by providing funds for debt repayment if the shortfall in debt service is caused by real currency depreciation falling below a predefined level.
- The **Asian Private Infrastructure Financing Facility (AsPIFF**) will help develop and provide equity to small and medium-scale greenfield infrastructure projects in the lower income countries of South and South-East Asia, acting as a patient investor and partner in the more challenging infrastructure sectors.

The PIDG facilities and Affiliated Programmes cover a very broad range of sectors, activities, and countries, and are designed to be complementary to each other. A number of projects supported by the PIDG have benefited from the support of more than one PIDG facility.

[1] PIDG Affiliated Programme
[2] PIDG Programme under development


NIDO

"PIDG is unique in that no other multi-donor alliance has the range of products and the ability to combine different combinations to catalyse private sector investment in infrastructure."

PIDG INDEPENDENT MID-TERM EVALUATION REPORT, OCTOBER 2006.

2.4. PIDG achievements to date

In its first four years of operation, the PIDG has made a number of significant achievements.

- PIDG has successfully established two investment facilities, two project development facilities and a technical assistance facility. The PIDG has also forged strong relationships with like-minded organisations including the GPOBA and the PPIAF.
- Members' funding commitments have grown from US$100m in 2002 to over US$350m in 2006.
- By December 2006, investments by the PIDG facilities of US$227m had led to the mobilisation of over US$2.6 billion in private sector investment, effectively leveraging PIDG members' funds by 11 to 1.
- The five core PIDG facilities (including DevCo) are actively involved in over 53 projects in the water, energy, transport, telecoms, mining, agriculture and industrial sectors.
- Cooperation across the facilities is strong, with almost 20% of these projects making use of two or more PIDG facilities.
- PIDG has a global presence through project activity in over 25 countries in sub-Saharan Africa and South and South East Asia.

In the past year alone:

- The PIDG membership has increased to seven, and now includes the Austrian Development Agency.
- A new window focusing on support for Small Scale Infrastructure Providers has been created within DevCo.
- EAIF refinanced its original debt package to augment its available funds and borrow on more favourable terms, leading to an increase in funds for further investment in sub-Saharan Africa by US$60m.
- Approval has been given by the Governing Council for the continued development of two new facilities: the CLF and AsPIFF.
- Although EAIF, GuarantCo and InfraCo have always followed anti-corruption policies, they have now formally signed-up to an anti-corruption framework adopted by the PIDG, and monitoring and evaluation frameworks must now be completed for every project selected for PIDG support.
- A positive independent Mid-Term Review of the overall PIDG approach and of the PMU highlighted the responsiveness and value for money of the PIDG activities and its management team.

3 The Infrastructure Market

3.1. Infrastructure as a means for pro-poor growth

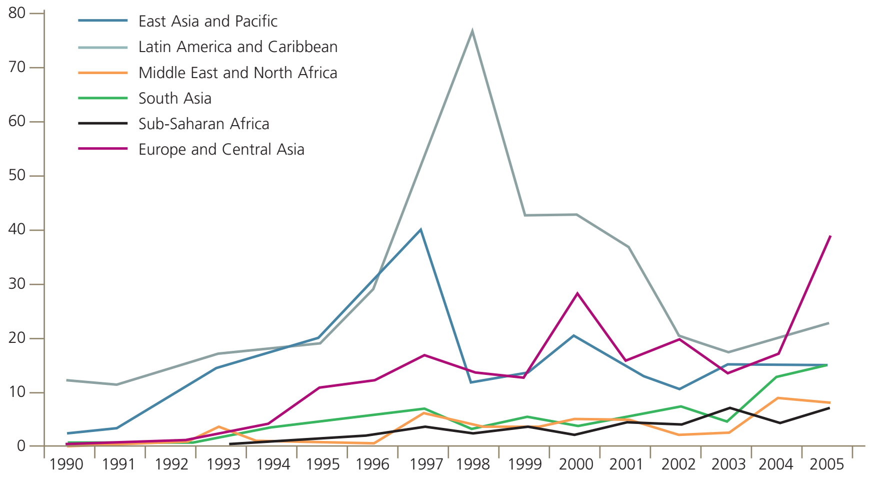
Efficient, reliable infrastructure is vital for economic progress and social development. The importance of infrastructure to pro-poor growth in particular is being increasingly recognised by donor agencies and development partners worldwide – not least because without further investment and progress in the sector it will be impossible to meet the MDGs. The availability of roads, water, energy, sanitation and telecommunications have a direct major impact on health, access to education and economic opportunities. Indeed, infrastructure makes valuable contributions to all of the MDGs.[3]

In addition to the established 'trickle down' effects of overall economic growth in providing pro-poor benefits, infrastructure provision also directly supports pro-poor growth by connecting poorer individuals and underdeveloped areas to core economic activities, allowing them to access additional productive opportunities.[4] In poorer regions, improved transport infrastructure in particular, reduces production and transaction costs. Infrastructure access can also raise the value of the assets of the poor. Recent research links the asset value of poor farm areas to the distance to agricultural markets, with improvements in communication and road services producing capital gains for poor farmers.[5]

---

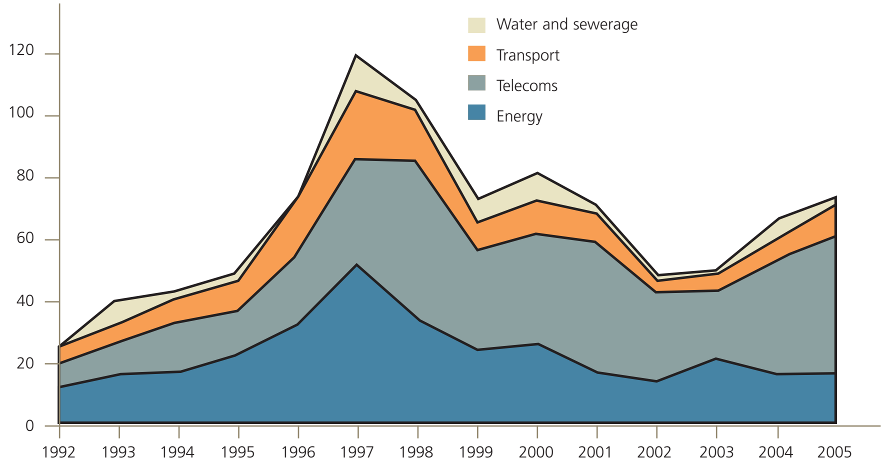
[3] OECD (2006), "Promoting Pro-Poor Growth: Policy Guidance for Donors - Infrastructure"; A table of more detailed examples of how the MDGs are met through infrastructure provision can be found in Annex 2 of this report.
[4] Wide range of research on www.worldbank.org, including "Pro-Poor Growth and Inequality" sub-site.
[5] Calderon and Servén, "The Effects of Infrastructure Development on Growth and Income Distribution", Journal of Economic Literature (2005); Jacoby, H., "Access to Rural Markets and the Benefits of Rural Roads." The Economic Journal (2000).

Figure 1: Trends in private participation in infrastructure (PPI) in low-income countries, by region, 1990-2005 (US$ billion)



Source: World Bank PPI database

Figure 2: Total PPI investment by sector across East Asia & Pacific, Latin America and Caribbean, Middle East and North Africa, South Asia, Europe and Central Asia, and Sub-Saharan Africa. (US$ billion)



Source: World Bank PPI database

3.2. Recent trends in infrastructure investment

Evidence continues to grow on the positive impacts of infrastructure development on pro-poor growth, yet the demand for such infrastructure services is not being adequately met, with the gap actually widening as incomes fall. Globally, more than 1 billion people lack access to roads, 1.2 billion still do not have safe drinking water, 2.3 billion have no reliable source of energy, 2.4 billion lack sanitation facilities and 4 billion are without access to modern communication facilities. Current estimates of the financing needs for infrastructure in developing countries stand at between 5.5% and 9% of GDP. Meeting these needs would require a doubling of the present levels of financing.[6]

Due to the high up-front costs and long gestation lag times for returns on investment, infrastructure development has predominantly been the domain of the public sector. However, spending on infrastructure in the least developed, low and lower-middle income countries has declined from around 15% of GDP in the 1970s and 1980s, to around 7% today. Since the mid-1990s, all sources of infrastructure funding have fallen dramatically, including from government, development assistance and the private sector. In terms of private sector participation, an increase in investment in the early 1990s was relatively short-lived in all but the most profitable sectors. Private investment in infrastructure spending in developing countries dropped from US$113 billion in 1997 to US$52 billion in 2003, and has yet to recover (see Figure 1). All regions of the developing world were affected by the decline, but the trend is particularly marked in sub-Saharan Africa, where a huge backlog of infrastructure investments continues to build up.

[6] World Bank, Infrastructure Division, www.worldbank.org

In addition to favouring certain regions of the world, private sector investment in infrastructure also favours particular sectors. There is more private sector involvement in the higher-value and/or lower-risk sectors such as telecoms and certain types of energy, with less interest in transport and even less in water and sanitation. Projects which target the poor remain less attractive for a number of reasons, including an inability and/or unwillingness to pay on the behalf of low-income users, as well as lack of access to project structuring expertise and finance.

Figure 2 illustrates how the bulk of investment has been concentrated in the energy and telecoms sectors over the past decade. Indeed, whilst overall private participation in infrastructure spending has decreased since the late 1990s, telecoms spending has increased from about 35% of total spend in 1992 to over 60% in 2005, with water and sanitation averaging only about 6% of total spending over the same period.

There is ample evidence to illustrate that infrastructure demands are rising, but that neither public nor private financing (or interest) is rising to the challenge of meeting the demand, particularly in the more challenging sectors.

The PIDG concept grew out of the recognition that increasing the participation of the private sector and making use of their expertise, finance and efficiency will be essential to increase the provision of infrastructure to levels necessary to meet demand and achieve the MDGs.

4

Facility Operations and Impact

This chapter summarises the activities of each of the PIDG facilities, as well as the PIDG Affiliated Programmes and the facilities in development. For each facility we have provided a synopsis of activities since inception, as well as a detailed case study highlighting the key economic and development impacts of a typical project supported by the PIDG.

The facilities adopt a professional approach to their operations, whilst always seeking to maximise the positive impact of their activities on the poor. To enhance the sustainability of their operations, the facilities engage wherever possible with local communities, private sector organisations and government, harmonising their activities with national-level infrastructure plans and Poverty Reduction Strategy Papers.

In line with PIDG's mandate to harness the efficiency and expertise of the private sector, EAIF, GuarantCo and InfraCo are managed by contracted private sector managers. DevCo and GPOBA are funded through Trust Funds at the World Bank, enabling them to call upon the considerable expertise of this organisation.

EAIF fund structure

Funding entity	US$ million
Equity (provided by the PIDG group)	**100**
PIDG Trust	100
Subordinated debt (provided by DFIs)	**85**
FMO (Netherlands DFI)	40
DBSA (Development Bank of Southern Africa)	25
DEG (Germany DFI)	20
Senior debt (provided by private sector lenders)	**180**
Barclays Bank	75
Standard Bank of South Africa Ltd	75
Kreditanstalt fur Wiederaubau (KfW), Germany	30
TOTAL FUND CAPITAL	**365**

4.1. The Emerging Africa Infrastructure Fund Limited (EAIF)

The EAIF was established to provide long-term, US$ denominated, debt finance for infrastructure projects in sub-Saharan Africa in order to assist in the alleviation of poverty.

Established in January 2002 as a US$305 million debt fund, EAIF is able to provide lending to 45 countries in sub-Saharan Africa. EAIF seeks to ensure a diversified portfolio with each major infrastructure sector (e.g. power, telecoms, transport, water) accounting for at least 10% of the total fund capital, with a typical investment falling in the range of US$15m- US$30m. EAIF lends to greenfield ventures, privatised infrastructure companies and for refurbishments, upgrades or for the expansion of capacity. The majority of EAIF's business is foreign currency lending, but EAIF is also able to provide guarantees where appropriate. Lending tenor can be extended up to a maximum of 15 years, and can be provided without political risk cover.

While EAIF lends on commercial terms, as a PIDG vehicle, it aims to support projects that promote economic growth and poverty reduction, benefit broad-based population groups, address issues of equity and participation, and promote social, economic and cultural rights.

Fund structure and breakdown

The EAIF has a tiered financial structure, with PIDG members providing equity through the PIDG Trust and commercial lenders and DFIs providing senior and subordinated debt to EAIF for on-lending to infrastructure projects in sub-Saharan Africa.

In 2006, EAIF was able to refinance its senior debt, lowering the cost and improving the terms of its senior debt, with a corresponding increase in the amount of senior debt of US$60m, and also including the use of a Euro lending option. Kreditanstalt fur Wideraufbau (KfW) of Germany joined as a senior debt provider with US$30m in 2006, bringing EAIF's total funding up to US$365m.

www.emergingafricafund.com

EAIF: Transactions which have reached financial close

Project	Sector	Description and financing parameters
AES Sonel, Cameroon	Power	In 2003 EAIF provided a US$30m loan towards the construction of a US$75m, 85MW power plant. EAIF financing bridged an important initial gap enabling the project to move forward, prior to participation from a much larger financing partner. EAIF subsequently committed a further US$2.3m for disbursement in 2007. The project will underpin AES Sonel's ability to generate electricity in circumstances when poor rainfall in the dry season limits hydroelectric capacity, with the new plant expected to increase national energy capacity in Cameroon by over 10%. The success of the project will also act as a role model for larger investments in the power sector in Cameroon.
Celtel, Sub-Saharan Africa	Telecoms	A US$30m loan from EAIF was the final step required for this telecoms project to go ahead, securing US$190m in private sector investment, and enabling the telecoms company Celtel to provide mobile connections to over 2.5 million people in 12 countries, an increase of 70% compared to 2002. EAIF provided the loan in 2004, which was fully repaid in June 2006 when Celtel refinanced the project.
Moma Mineral Sands Project, Mozambique	Multi-sector	The developers of this titanium mineral sands project approached EAIF as a 'lender of last resort'. Located in one of the most under-developed regions of Mozambique, the US$413m project is expected to be the second lowest cost producer of titanium in the world, which will be converted to titanium dioxide for use in the paint and ceramics industries. EAIF has committed US$24.5m of senior and subordinated debt to the overall debt package of US$270m, with US$15.5m disbursed to date. The project will bring important social benefits to the area through significant training to the local population and is expected to employ 1,000 people during the construction phase, and a further 425 during mining operations.
MTN Nigeria	Telecoms	In 2004 EAIF committed a US$10m loan towards this US$200m project to finance the expansion of MTN Nigeria's cellular telephone network. US$5m was disbursed in 2004, and was repaid in March 2006. MTN now provides services in 223 cities and towns, and more than 10,000 villages, spanning the 36 states of Nigeria. The additional capacity has increased the number of subscribers from 2 million to 3.4 million people, with an estimated 30,000 direct and indirect jobs being created. The project has also raised the need for increased technical capacity to maintain and develop cutting edge technology support within Nigeria, and MTN is committed to training local staff and investing in their development and welfare.
SPM Ghana	Transport support	This project consists of the construction and installation of a single mooring point system to be located in the land and sea area adjacent to the port of Tema, significantly improving Ghana's transport infrastructure. In 2004, EAIF provided a US$12m loan as part of an overall US$35m debt package for the US$42m project. The loan was repaid in October 2006.

Project	Sector	Description and financing parameters
Obajana Cement, Nigeria	Greenfield cement production plant	The project consists of the construction of two cement production lines with a capacity of 4.4 million tons per annum. The plant will provide new supplies of cement, which are currently almost entirely provided by foreign imports. EAIF has committed US$30m of debt of which US$26m has been disbursed, as part of an overall financing package of US$479m. The total cost of the project is US$800m. The project will generate significant training and employment opportunities and government tax revenues (in excess of US$50m per annum), and will use energy from a natural gas source which was previously being flared. The project is expected to employ 250 local people during construction, and 450 during operation.
Celtel Nigeria	Telecoms	EAIF has committed a US$30m loan to Celtel Nigeria, the third largest mobile operator in Nigeria. The financing is part of a US$350m financing package for the expansion and upgrading of their entire network. The project will significantly improve access to mobile telephone services throughout the country, as well as increasing competition in the telecoms sector across the continent.

EAIF: Transactions approved by the Board but not yet reached financial close

Project	Sector	Description and financing parameters
BidCo palm oil plant, Uganda	Agriculture	EAIF has committed US$22m to this project to build an extensive palm oil plantation on the island of Bugala in Lake Victoria. The project will contribute significantly to the local economy, creating a minimum of 5,000 direct jobs, saving on import costs for edible oil by US$55m per year, and providing support to 14,000 rural outgrower families.
Eleme Petrochemical, Nigeria	Industrial infrastructure	EAIF has committed a US$20m loan to support the privatisation of this petrochemical plant, as part of a total financing package of US$160m. The project will contribute significantly to the rehabilitation of Nigeria's industrial infrastructure, including through import substitution, privatisation demonstration effects and a community development programme bringing power to an area of 50,000 people.
Ethiopian airlines, Ethiopia	Transport /tourism	EAIF is providing a US$30m loan to this unique airline expansion project. Ethiopian airlines is a 100% publicly-owned entity, often held up as a model business for other airlines in Africa. The EAIF financing is bridging a crucial gap enabling the airline to purchase additional, new aircraft at a cost of US$460m. Ethiopian airlines is the number one formal sector employer in the country, and the project is likely to bring significant benefits in the tourism sector.

EAIF Case Study

Kibuye Renewable Energy Project, Rwanda

Located in the Great Lakes region of Africa, Rwanda is a small, poor country where about 90% of the population is engaged in subsistence agriculture. It is the most densely populated country in Africa, and is landlocked, with few natural resources and limited industrial development. The 1994 genocide devastated the country's economy and it is estimated that in 2001, 60% of the country's population was living below the poverty line. The political and economic situation continues to improve, although the country's ability to attract private sector investment remains limited.

Rwanda faces persistent energy shortages, generating only 35 MW of power itself with an estimated shortfall of 40 MW. In 2003, less than 5 percent of the population had access to electricity. To meet energy demand, approximately 40% of total import spending in Rwanda is used for the purchase of oil for power generation, with this proportion continuing to increase as oil prices rise globally. By the start of 2005, the cost of electricity had reached US 20 cents per kwh (in comparison to 5 cents per kwh in South Africa, or 9 cents in the USA).[7]

To enable Rwanda to meet its energy needs and help alleviate the financial burden of expensive imported petroleum, the country requires both investment in power generation and distribution, as well as consideration of alternative energies to fossil fuels.

EAIF involvement

Following EAIF's initial identification of the opportunity, EAIF has been appointed as joint arranger with the IFC for the debt financing of an investment in a renewable energy project under development in Kibuye, in western Rwanda. The project will use methane gas from Lake Kivu, which is released from natural vegetation found at the bottom of the lake and can be converted into energy. The project consists of the construction of a gas extraction plant and accompanying 35 MW power generation plant, at a total expected cost of US$76m. EAIF's contribution will consist of assistance with local abstraction measurements (facilitated through a grant from the TAF) plus the provision of a loan of US$15m towards the project.

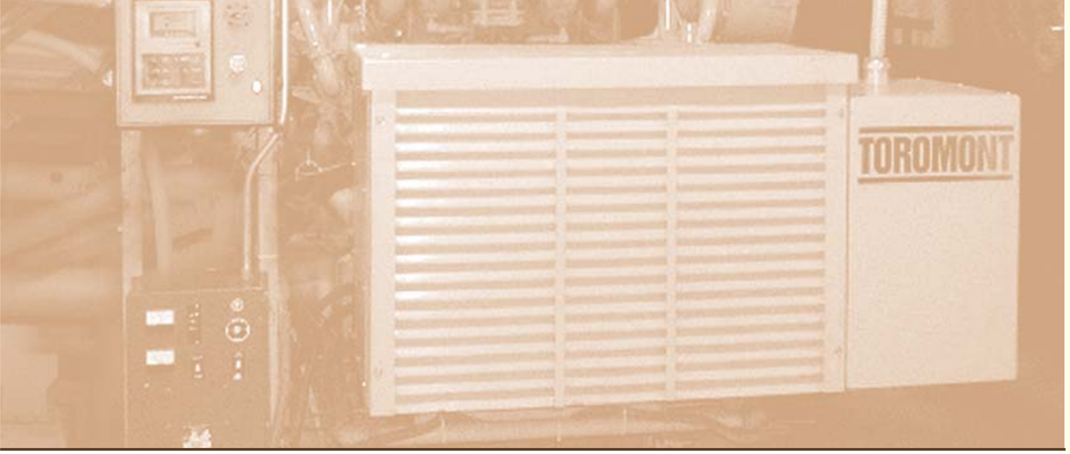
Shareholding in the project will be split between the Government of Rwanda who will hold 30%, with the remaining 70% resting with a private company with a number of international shareholders. Wartsila, a large international marine and energy markets company with significant experience in Africa, will have overall responsibility for supervising the construction of the power plant and management of the project. The off-taker of the power produced will be the state-owned monopoly, Electrogaz.[8]

Risks and challenges

A number of risks and challenges associated with the project are under ongoing assessment.

- Technology risks: The project is the largest use of water-dissolved methane gas ever, which could present some challenges from a technology perspective. However, there is already a small functioning gas extraction plant from Lake Kivu in Gisenyi (in Rwanda), and the FMO of the Netherlands are providing funding for a larger pilot plant to be established at Gisenyi from which further lessons can be drawn.
- Partnership risks: The power plant and gas extraction plant are being built and run by two separate companies, and it will be essential to ensure they work together to

[7] Energy Information Administration, www.eia.doe.gov.
[8] Note – as this report went to press PIDG was advised that this project is now subject to revised bids from private investors.



cover all of the aspects of power delivery. These risks are being mitigated by clearly defining each operator's roles and ensuring that both operators are experienced in their respective sector. Overall responsibility for delivery will lie with Wartsila.

- Lake stability risks: Taking gas out of the lake will alter the stability of the lake, leading to potential environmental hazard. However, the gas saturation of Lake Kivu is relatively low at 8%, and a detailed research project supported by a grant form TAF is underway to ensure that the release and any impacts resulting from the project will be measured and monitored appropriately.
- Environmental impact: An Environmental Impact Assessment is in progress for the project, as well as a full Environmental Management Plan, both of which will be undertaken to meet World Bank Standards. The renewable energy project will also lead to a substitution of imported oil by locally generated, sustainable power. In addition, the country will become eligible for carbon credits from the World Bank.

Development impact

The development gains from this energy project are expected to be significant. The plant will generate 35 MW of much needed power to cover the current shortfall of 40 MW, and there is potential for the power generation from the plant to increase to up to 200 MW over the next 10 years. As a local energy supply, the need for expensive oil imports is reduced, generating hard currency savings for the country as well as savings for individual consumers. The tariffs for energy are expected to be significantly lower at US 5 cents per kwh, as opposed to the current US 20 cents per kwh. Finally, the energy produced by the plant would be clean and renewable.

Providing that the gas extraction tests are successful, this unique transaction is expected to close by the end of 2007. The new plant would become operational in early 2010.

Renewable Energy and Development

Over the past decade, with economic growth rates rising across many parts of the developing world, energy security, and in particular energy scarcity, has become a major development issue. Energy fuels economic growth and development directly, as well as indirectly through an increase in industrial growth and employment. Increases in economic growth lead to further increases in energy demands which, when met, lead to a positive cycle of growth.

Most countries in the developing world (and the developed world) continue to rely on fossil fuels as their primary source of energy. Yet estimates suggest that these fuel supplies are depleting rapidly and are non-renewable, creating a supply constraint which – combined with political considerations – is leading to a steady increase in the price of oil. In many developing countries that lack domestic supplies of fossil fuels, this increase has led to a large, and growing, import bill, using up valuable hard currency. Moreover, the greenhouse gases and other pollutants released by the combustion of fossil fuels impose a severe threat to the natural environment in the form increasing levels of pollution and climate change.

Increasing attention is being paid to alternative, renewable energy options such as hydro, wind, biomass and solar power technology. In contrast to fossil fuels, renewable energy sources present a non-depleting and non-polluting alternative. The use of domestic renewable energy sources can also ease the budget constraints of low-income countries by decreasing their reliance on expensive foreign imports of oil, and can be particularly useful in rural and remote areas where the transmission and distribution of fuels can be even more difficult and expensive.

For developing countries, increases in domestic, renewable energy capacity present a unique and exciting opportunity to create economic growth and poverty alleviation through increased energy provision at a lower cost than traditional fossil fuels.

4.2 InfraCo Limited (InfraCo)

InfraCo is an infrastructure development company that seeks to address the lack of projects developed in the poorer developing countries suitable for private investment. InfraCo develops projects from an early conceptual stage, taking on the highest risks in the development of infrastructure transactions, with the aim of selling these projects to private investors once the development process has been completed. InfraCo's involvement is designed to catalyze new investment in projects which would not otherwise be undertaken. Taking on this developer role, InfraCo:

- acts as a principal, shouldering much of the upfront costs and risks of early stage development and thereby reducing the entry costs of private sector infrastructure developers;
- secures in-principle commitments from providers of finance to support investments, subject to entry by a competent private sector sponsor; and
- prior to financial close, offers structured investment opportunities to private sector investors.

InfraCo was formally launched in April 2005 with a budget from PIDG donors of US$10m. This has since been increased to US$20m, with some additional funding support provided by the IFC. In the first 18 months of operations, InfraCo originated and continues to develop projects with potential direct investment in host countries in excess of US$750m. It has devoted its work to date primarily to projects in Africa and Southeast Asia.

www.infracolimited.com

InfraCo: Summary of activities to date

Project	Sector	Description
Kalangala Infrastructure Services, Uganda	Multi-sector	InfraCo is supporting the development of a unique multi-sector integrated infrastructure development project on Bugala Island in Lake Victoria. The project involves power generation and distribution, improved water supply, an upgraded ferry service, and new road infrastructure structured as one single commercial project. Total development costs for InfraCo are expected to be US$1.4m. The new services will help meet current demand for services to a poor and isolated community of 25,000 people. (see InfraCo case study for more details).
Sunyani Housing, Ghana	Housing/ industrial	InfraCo is contributing US$1m towards the development of environmentally friendly, sustainable and affordable family housing for an influx of employees to a new mining community in the Sunyani area of Ghana. The project represents a move away from traditional single person accommodation typical in mining communities to more family-friendly housing.
Aba Power, Nigeria	Energy	InfraCo is supporting the development of a 105 MW natural gas fired generation plant and associated transmission lines in Aba to supply a nearby industrial town, providing power at approximately half the costs that industrial companies currently pay to generate the power themselves. InfraCo's contribution is expected to be US$2m. The project would be the first private independent power project in Nigeria.
Tema Power, Ghana	Energy	InfraCo is contributing US$5m for the development of a 300MW combined cycle power plant fuelled by natural gas from the West African Gas Pipeline. The additional power from the plant will help to meet the growing demand for energy in Ghana which is upwards of 80MW per year due to high levels of growth and a national rural electrification programme.
Chiansi Water, Zambia	Agribusiness	InfraCo is contributing US$0.6m for the development, with a group of farmers, of a partly privately funded water and irrigation system to boost agricultural production of sugar, maize and wheat. The project will greatly improve access to water for small scale farmers with no access to irrigation who currently face a rainy season which is only three months long, once per year. In most areas the irrigation would be gravity fed, limiting a need for electricity.
Beira Land, Mozambique	Housing / industrial	The project consists of the development of a land reclamation project for housing development using the sand dredged from the shipping channel near the Beira port. The city and port of Beira were severely neglected during the civil war period and are in need of significant upgrading. The new land will meet a shortage in the area, and will be equipped with all utilities and sold in lots for social housing as well as residential and industrial development. InfraCo's contribution will be US$1m.
Antara Cold Storage facility, Vietnam	Agribusiness	InfraCo is contributing US$0.9m for the development of cold storage facilities for the trade hub of Antara, with the objective of increasing exports of frozen seafood and other products from southern Vietnam. The US$14.5m storage facility will significantly increase hard currency revenues for the country. It will be the first of its kind in Vietnam, and will be operated by a world-class logistics provider.
Kampala Sanitation Project, Uganda	Water and sanitation	InfraCo is contributing US$1.7m towards the ioint development of a new privately funded sewerage treatment plant and collection system with Uganda's National Water and Sewerage Corporation. The plant will service Kampala's rapidly growing population, where sewerage coverage is extremely low (estimated at 6%), presently covering only the central part of the city.
KIS Renewables, Uganda	Energy	InfraCo is developing a project for the establishment of a solar power renewable energy project for a remote off-grid community on Bugala Island, in Lake Victoria. The project will substitute renewable power for the expensive and inefficient diesel generators and car batteries currently being used. InfraCo is contributing US$0.6m towards development of the project.

InfraCo Case Study

Kalangala Infrastructure Services, Uganda

Bugala Island is located in Lake Victoria with a population consisting of poor fishing and farming communities. The island currently faces high levels of migration in relation to the fishing industry, which employs over 80% of the island's population. However, current levels of infrastructure provision are inadequate to accommodate growth in the industry, let alone meet the needs for the forthcoming development of a large palm oil plantation on the island (BidCo). Without further investment in infrastructure, future economic and social growth on the island will almost certainly be frustrated.

InfraCo is developing a single large commercial project to eventually be sold to the private sector – Kalangala Infrastructure Services (KIS) – made up of four distinct infrastructure components.

Ferry refurbishment

A government-owned ferry currently operates from Bukakata on the mainland to Luku Point on Bugala island, but the ferry traffic exceeds capacity resulting in overloading, and the ferry landings are not always useable due to low water levels in the Lake. InfraCo is developing a refurbishment project for a new private ferry service, which would be owned by KIS and operated by a private sector operator. The venture presents the first owner/operator license for a private commercial ferry service issued in Uganda.

Water supply

Prolonged draught in the region has dried existing wells on the island and there is insufficient water to meet the needs at the fishing settlements. As a result, people have resorted to drinking untreated water from Lake Victoria, increasing the incidence of water borne diseases and sickness on the island. Furthermore, a lack of well water has meant that communities who do not live near the Lake are forced to pay dearly for water to be delivered inland. InfraCo is developing a new water supply system using a solar-powered pumping system which will be installed in the principal fishing settlements; in addition, the water supply component of the project will include the rehabilitation and expansion of the existing water reticulation system in Kalangala Town, the island's main trading center. The system will be owned by KIS, in its capacity as designated water authority, and will be operated by a private sector operator, under a performance based contract with the Ministry of Water (through the local government). The project will constitute the first designation in Uganda of a private firm as a "Water Authority" entitling it to own the water supply system under the regulatory supervision of the Ministry of Water.

"The proposed Kalangala Infrastructure Project will go a long way to alleviate some of the pressing development incapacities, which include among others lack of all weather road networks, inadequate/unreliable transport connection to the mainland, poor safe water provision and absence of energy saving technologies that are low cost and environmentally friendly… If all the proposed sub-projects are implemented, this will further enhance the processes geared towards improving the standards of living of our communities."

Mr. O.H.Nakyanzi, Chief Administrative Officer, Kalangala District, Government of Uganda

Electricity supply

Bugala island is not connected to the national electricity grid and communities rely primarily on firewood and paraffin for energy, with only a handful of diesel generators and solar arrays in existence across the island. A significant proportion of the household budget is thus spent on energy. InfraCo is taking responsibility for designing the specification for an island grid electricity system, likely to involve a hybrid solar/diesel system. The project will be owned by KIS and will be operated by a private sector provider. The power supply component of the project represents the first private licence issued for an integrated electricity generation and distribution project in Uganda within the rural electrification programme.

Road upgrading

One 66 kilometre road runs the entire length of Bugala Island, but is an outdated dirt road which cannot accommodate heavy vehicles in all weather conditions. This situation creates bottlenecks for a fishing industry processing plant on the mainland, and will continue to impede growth of further industry as the island develops economically. InfraCo is developing a project to upgrade the road, undertaking a road traffic survey, land survey and economic viability study. The new road will be owned by the Government of Uganda, with maintenance carried out by KIS or the Government.

The total cost of the four-component KIS project is estimated at US$35m, with InfraCo's up-front development cost totalling approximately US$1.4m in third-party expenses. Placing the four integrated components under one large project achieves economies of scale and increases attractiveness to private sector investors and operators. InfraCo is in the process of structuring the financing package and is already assessing the market for the opportunity, including seeking support from international development finance institutions. The project will be structured as a commercial enterprise grounded in conservative assumptions, with an attractive rate of return for investors. The use of private funding will help achieve financial and operating discipline, whilst it is expected that grant funding and subsidies will be used to increase affordability for the local population.

Public consultations have been held across the island, and an Environmental Impact Assessment is being undertaken which will satisfy national requirements as well as applicable World Bank Guidelines.

4.3 GuarantCo Limited (GuarantCo)

GuarantCo is a local currency guarantee vehicle designed to mitigate credit risks for local currency financing of infrastructure by local institutional lenders. The dual objectives of GuarantCo are to encourage domestic financing of efficient infrastructure services and to promote the development of local capital markets – both of which are conducive to PIDG's ultimate goal of reducing poverty through economic growth.

GuarantCo was initially established in September 2003, with a total capital commitment of US$25m. It now has a funding base of US$73m, provided by both the PIDG Trust and FMO. In 2006, a management contract was awarded to Standard Infrastructure Fund Managers Africa Ltd (SIFMA), who also manage EAIF, thus bringing the two vehicles closer and facilitating joint investments. The award of this contract signalled the start of a 3-year pilot period.

GuarantCo's support extends to start-up companies and greenfield developments, operating infrastructure companies, privatised companies, parastatals or public corporations and to the broad range of municipal infrastructure. The initial geographical focus is sub-Saharan Africa and the poorer countries of Latin America, South and South-East Asia.

GuarantCo: Summary of activities to date

Project	Sector	Description
Celtel Kenya	Telecoms	In 2005, GuarantCo provided a guarantee as part of a syndicated guarantee covering 75% of the debt service for a bond issued by the mobile phone operator Celtel Kenya worth US$62m. The bond was launched and successfully placed with institutional investors in December 2005, and was the largest ever listed on the Nairobi Stock Exchange. GuarantCo's exposure limit is US$10m. Celtel operates in some of the poorest countries in Africa. This project will enable them to further expand, improving telecoms infrastructure throughout the continent.
Celtel Chad	Telecoms	GuarantCo is providing a counter-guarantee, along with a guarantee from the FMO, for a loan to expand Celtel Chad's mobile telephone network throughout the country. The CFA 7 billion (US$13.6m) guarantee enabled the company to source CFA 17 billion (US$33m) in local currency financing from two regional commercial banks, which would not have been possible without a local currency guarantee.

GuarantCo: Transactions with due diligence completed but not yet at financial close

Project	Sector	Description
Vietstar waste, Vietnam	Water and sanitation	GuarantCo is providing a US$8m guarantee, as part of a total guarantee of US$24m for a waste management project in Ho Chi Min city. The project involves the collection of waste from the city, with the extraction of plastic for re-use and conversion of biomass substances for composting and fertiliser uses. The project is expected to significantly reduce landfill requirements.
Safal Group, East Africa	Housing / industrial	The Safal Group is one of the largest manufacturers of corrugated iron and roofing materials in East Africa. The group is seeking to expand its operations and GuarantCo is providing US$12m in guarantees for company bond issues. The financing will enable the company to develop and build a new steel rolling mill in Kenya and a galvanising plant in Tanzania.

GuarantCo Case Study

Celtel Chad

Access to telephone services has been limited across Africa, particularly in rural areas, with fixed landline provision being notoriously expensive, unreliable, or simply unavailable. Yet it is well documented that improved telecommunication services stimulate economic activity and lead to productivity gains, which in turn have a positive impact on poverty reduction.

Chad, located in central Africa, is one of the poorest countries in the continent, with a per capita income of less than US$400 per year.[9] Its economy has traditionally been handicapped by its landlocked position, poor internal communications, high energy costs, scarce water resources and a history of instability. In 2003, Chad became an oil producing country with the completion of the Chad-Cameroon pipeline, giving rise to strong hopes for the economic future of the country. Subject to the political problems surrounding the pipeline being resolved, it is expected that oil income may indeed transform the country's economy in the coming years.

Telecommunications coverage in Chad is extremely low – even considered within an African context – with only 14 fixed and mobile phone subscribers per 1,000 people in 2004 (in comparison with a figure of 84 for the Sub-Saharan African region, and 1,321 in high-income OECD countries). The fixed line service coverage is inadequate, with less than 50% of the national fixed network lines in use, and a waiting period for a fixed line of up to five years. Privatisation plans for the fixed line network are not progressing as planned. In contrast, progress in the mobile phone market is flourishing. Demand for mobile phone services is large and growing, with the number of mobile subscribers increasing more than tenfold between 2002 and 2006.

Celtel Chad is the largest mobile telecom operator in the country with more than 300,000 subscribers, and a 75% market share. Their own network – independent from the national transmission network – has a 350,000 line capacity, and the company is hoping to considerably expand this network over the next six years, increasing line capacity to 500,000 in 2007, and to 1.5 million by 2012.

In order to carry out this expansion, Celtel Chad sought a loan of CFA 17 billion (US$33m) for capital expenditure and to cover refinancing of outstanding US dollar loans. Consistent with their policy to increase local currency financing, Celtel Chad required the loan in CFA Francs. Financing was offered by the Central African Development Bank (BDEAC) and Afriland First Bank in Cameroon for up to CFA 4 billion and CFA 6 billion respectively, leaving CFA 7 billion outstanding. Afriland was willing to offer the outstanding amount but only on the condition that it was guaranteed by a third party, as they had reached their single customer limit.

Following thorough due diligence, GuarantCo and the FMO agreed to jointly provide the CFA 7 billion (US$13.6m) guarantee, with FMO fronting the guarantee, and GuarantCo providing a counter-guarantee. By providing this guarantee, FMO and GuarantCo enabled Celtel to raise the additional local currency senior debt, reducing Celtel's foreign exchange risk as its only alternative was to borrow in US dollars. The use of local currency financing matches Celtel's revenue base and therefore enhances the profitability of the company.

Development impact

The economic and developmental impacts of the expansion project are significant.

- Current mobile penetration in Chad is currently still very low at about 5% of the population. Celtel's expansion will enable a rapid increase in penetration, improved access to telecommunication services and improved quality of services. It will also encourage competitors to expand their network and improve services, including increased pressure for lower tariffs.
- Celtel is one of the largest formal sector employers in the country, with a workforce of 185 employees, projected to increase to 350 by 2013. Significant indirect employment will also be created as a result of the expansion through suppliers, distributors and dealers of mobile phone products and services, in both the formal and informal sector.
- The expansion will also create increased government revenues in the form of annual licence fees, corporate taxes and import and stamp duties.

[9] World Bank, World Development Indicators, 2005.

TELECOMS BENEFITS

It is well documented that improved telecom services stimulate economic activity and lead to productivity gains, with the attendant economic growth a necessary condition for poverty reduction, albeit not sufficient in itself. Mobile phones have been recently estimated to raise long-term economic growth rates in developing country markets by 0.6% per annum based on an extra 10 phones per 100 people, with the impact on such growth being twice as large in developing nations than in developed ones.[10]

In poorer countries, where other means of communication are limited and/or of poor quality (roads, postal service, fixed land-lines), mobile phones provide an important means of communication, saving significant time and money. People can use their phones to stay in touch with friends and family, to speak with business colleagues in another village, town or country, and access emergency and health services from a distance – being able to get a medical diagnosis by phone can mean the difference between life and death, especially when the nearest doctor is many tens of miles away. Furthermore, mobile phones do not rely on permanent electricity supplies and can be used by people who cannot read or write.

One innovative example of how mobile technology is being used in poorer communities is the "One4all" system introduced by Celtel in Africa – a mobile payphone based on a SIM-card technology. The One4all system works by enabling individuals to buy a normal mobile handset and SIM card, and use the handset as a public telephone and prepaid airtime recharge terminal. This shared phone system provides an innovative means of enabling entrepreneurs to make money through a modest financial investment, and provides an affordable means of communication for individuals who are unable to acquire their own handset or telephone service. Celtel has now pioneered this approach in four African countries (Zambia, Kenya, Uganda and Malawi) and is likely to roll out the Celtel programme across Africa in the future.

[10] London Business School study: "Africa: The Impact of Mobile Phones", Vodafone Policy Paper Series, March 2005. Also see World Bank Infrastructure and Communications Department www.worldbank.org/icct

4.4 Technical Assistance Facility (TAF)

The TAF was established to provide grants to the various PIDG Facilities and Affiliated Programmes to assist government and private sector entities to access and take best advantage of the particular vehicle or facility. These grants can be used for capacity building activities, the provision of advisors, training, secondments, or workshops, technical and regulatory reform studies and technical assistance.

The overall objective of the TAF is to enhance the ability of potential PIDG clients to evaluate, develop and/or implement risk mitigation, financial and regulatory mechanisms, standards, systems and procedures essential to raising funds in the capital markets in association with PIDG.

The TAF became operational in February 2004 with a donation from the World Bank Group's Development Grant Facility (DGF) to the PIDG Trust of US$3.7m, followed by a further grant of US$3m in December of the same year. In 2006, DFID and DGF approved further allocations of approximately US$1.6m and US$1.7m respectively, bringing TAF's total income to approximately US$10m at the end of 2006.

To date, TAF has committed almost US$8m in grants to PIDG vehicles for 23 projects. All of the PIDG facilities, including the Affiliated Programmes (DevCo and GPOBA), have been recipients of support, with projects ranging from early phase project feasibility and implementation support, through to the development of local human capacity. In conjunction with these grants, the TAF Technical Adviser has carried out due diligence activities with respect to a number of proposed projects, and assisted PIDG facility managers and staff to define activities necessary to support projects in achieving developmental objectives, as well as economic and financial goals.

In conjunction with GuarantCo, the TAF is also collaborating with the World Bank Group's Finance, Economics, and Urban Department to provide technical assistance grants to facilitate sub-sovereign credit enhancements and private sector provision of infrastructure to those projects meeting the objectives and priorities of the PIDG programme. Through this cooperative agreement, TAF supports GuarantCo in its partnership with these agencies. TAF is also supporting other PIDG vehicles in their efforts to collaborate with bilateral and multi-lateral programmes such as the World Bank's transportation, energy, and housing programmes in Africa. TAF also consults regularly with both PPIAF and the Cities Alliance in order to facilitate coordination of PIDG activities with programmes being considered and/or implemented by these agencies.

TAF: Summary of activities to date

Project	Sector	Description
Kakira Rural Development Phase I and II, Uganda	Multi-sector	TAF provided a total of US$148,300 to EAIF in support over two phases of this project. In the first phase, EAIF was considering a loan to a private sector entity to fund infrastructure (electricity, water, transport, education, health) supporting farmers (outgrowers) who provide raw materials to Kakira Sugarworks Ltd. TAF funding was used for feasibility studies involving local government officials and stakeholders in defining the constraints and needs of the outgrowers, and developing an outline business plan. Building on Phase I, TAF funds were again used to develop a communication outreach programme for the broader outgrower community, develop workplans for initial projects, begin the development of KORD (the infrastructure fund), and begin discussion with potential funding sources (donors, banks, etc.). Although the final project proved too small to meet EAIF criteria, the resulting studies were used to raise local equity and investment funds for much needed infrastructure.
Toamasina Port, Madagascar	Transport	TAF funding of US$315,790 was provided to DevCo to help support implementation of an interim management assistance programme for the Port of Toamasina to strengthen government and port management during privatisation of port activities. The project has achieved its objectives. Bids were successfully managed and container operators selected. Private sector concessionaires are making investments and interface between container operations and other port activities has been achieved, with increases in operational efficiency (see DevCo case study).
Tanzania Power	Energy	TAF funding to GuarantCo of US$15,000 enabled assistance to the Government to evaluate the potential market and need for gas versus existing hydro power. After completion of the preliminary analysis, the sponsors decided not to proceed with further investment.
Beira Corridor, Mozambique	Agribusiness	TAF provided US$117,395 to InfraCo for a study to identify priority horticultural investments in the Beira Corridor region of Mozambique and the infrastructure investments needed to support them. The results were shared and made available to potential investors.
Nigeria fertiliser	Agribusiness	TAF funding of US$48,175 was provided to InfraCo to facilitate the private sector development of a urea fertilizer factory that had been constructed by the government. The factory was built but never operated satisfactorily under public ownership, and initial attempts to privatize were unsuccessful. TAF provided funds to develop a comprehensive analysis of the potential for private sector investment and facilitate open competitive bidding which resulted in selection from a qualified shortlist of bidders of well financed investors (approximately $150 million) with highly qualified technical support.
Madagascar Ports Privatisation	Transport	TAF provided US$74,500 to DevCo for the hiring of consultants to train and support government personnel in their efforts to structure transactions bringing the private sector into the operations of the sea and air ports. The airport aspect of this project is stalled and the consultant's contract expired with about 50% of funds being utilised. Negotiations are currently underway to restart the programme.

Project	Sector	Description
Bangalore Water concession, India	Water and sanitation	A TAF grant of US$300,000 is being used by DevCo to support the development of civil society activities, managed by a local NGO, to involve local communities in the concession of water distribution services. The work involves organisation of community groups, information and promotional activities, facilitating subscriptions, and evaluating and monitoring private sector delivery and government monitoring. Changes in local government have led to the IFC and DevCo putting their project on hold. The remaining TAF funds ($285,000) will be returned to the PIDG Trust.
BidCo Palm Oil, Uganda (BidCo Infrastructure Services)	Agribusiness	TAF provided a US$375,000 grant to InfraCo for assistance to the Government of Uganda to prepare a Development Plan for development of the palm oil industry. The grant included a review of the commercial feasibility of private sector proposals to create a palm oil industry, as well as the impact of proposed government obligations and ways to meet these obligations. The project was successfully completed resulting in a Development Plan adopted by the Government. This Development Plan led the way for the implementation phase for development of much needed infrastructure services for the area (see Kalangala Infrastructure Services summary below).
Kalangala Infrastructure Services, Uganda	Multi-sector	Based on the results of a Development Plan for the BidCo Infrastructure Services project, TAF is providing US$348,000 to help finance further detailed studies and analysis (technical, financial, environmental) for implementation activities. The funds are being used to complete an Information Memorandum sufficiently robust to raise debt and equity financing for a private sector infrastructure development company – Kalangala Infrastructure Services. The company would be responsible for a multi-sector project including improved water systems, road upgrading, ferry service rehabilitation and renewable energy development, all of which will be developed, operated, and maintained by the private sector. Design studies for the water system have been completed and other technical studies are underway. Environmental studies are nearing completion and will be submitted soon to Government. TAF financed studies are being used to support InfraCo's efforts to raise donor and investor funding. (Please see InfraCo case study for more details).
Tema Power Plant, Ghana	Power	TAF funding of US$345,000 was used by InfraCo for a market study of power supply and consumption in Ghana to assess the potential need for additional capacity, as well as a technical study to evaluate all major technical factors surrounding the project. A clear strategy and potential business plan, including possible off-take arrangements was developed. The studies and business plan have provided the information needed by sponsors to proceed and a short-list of potential bidders for an IPP is being prepared. A potential site has been cleared, technical designs are proceeding, and environmental permits received and/or applied for.
Technical Assistance Programme, Ghana	Multi-sector	TAF provided US$45,000 to InfraCo for technical assistance for the Government of Ghana and the private sector in the Government's current efforts to explore and concession activities in a number of sectors. This work is ongoing.

Project	Sector	Description
Moatize Capacity, building Mozambique	Power	In conjunction with the concession to the private sector of development rights for the Moatize Coal Deposit in Tete Province, a TAF grant of US$1.025m was provided to DevCo to fund technical assistance and capacity building over two years to support the activities of the Government of Mozambique to engage responsibly with the new concessionaire. The funds were for use in negotiations and finalisation of the complex transaction, implementation of the various aspects of the concession, and developing capacity to carry out monitoring and regulatory duties in conjunction with this concession as well as anticipated future projects. Due to various issues, DevCo has not been able to implement this phase of the project, and TAF funds were withdrawn in November 2006 and returned to the PIDG Trust.
KRC / URC , SME Linkages Kenya and Uganda	Transport	In conjunction with the concession to the private sector of the two State-owned railways in Kenya and Uganda, TAF provided US$1m to DevCo to support the activities of the Governments of Kenya and Uganda and the newly-concessioned private railway operator in facilitating the creation and strengthening of privately operated small and medium enterprises (SMEs). The SMEs would provide services, parts and equipment to the newly privatised joint railway, as well as position them to market their goods and services outside the railway sector. The work carried out through the TAF grant incentivised to the concessionaire to include the work in his proposal. The concessionaire has taken control and begun operations. SME related work is scheduled to begin in March, 2007.
Geometric Power Aba, Nigeria	Power	TAF is providing US$950,000 to InfraCo to support the establishment of a 105 MW natural gas fired generation plant and associated transmission lines to supply a nearby industrial town, providing power at approximately half the costs that industrial companies currently pay to generate the power themselves. The project would be the first private independent power project in Nigeria. The results of the studies have enabled the local partner to hold discussions with possible permanent equity investors for the project. One investor has completed its due diligence and has also held discussions with the IFC about their interest in investing in the project.
Sunyani Housing, Ghana	Housing / industrial	TAF is providing US$466,000 to InfraCo towards the development of environmentally friendly, sustainable and affordable family housing for an influx of employees to a new mining community. This project represents a move away from traditional single person accommodation typical in mining community to more family-friendly housing. This project was getting underway at the end of 2006.
Colombo Waste water project, Sri Lanka	Water and sanitation	TAF provided US$250,000 to GPOBA to design and test subsidy schemes to enable access by low-income residents to a new wastewater collection and treatment system being developed by the Sri Lankan government with assistance from Sida. The grant also provides capacity building to the local agency responsible for development and operation of the scheme so as to enhance replicability. This project was just getting underway at the end of 2006.

Project	Sector	Description
Kampala Sanitation, Uganda	Water and sanitation	TAF funds of US$615,000 to InfraCo are being used to support the joint development of a new privately funded sewage treatment plant and collection system between InfraCo and Uganda's National Water and Sewerage Corporation. Recognised as a high priority by Government and the World Bank, TAF is supporting the Government's efforts to prepare and evaluate alternative scenarios, prepare environmental assessments, develop tender documents, and improve the technical, financial, and regulatory capacity of the responsible government agency to encourage and facilitate private investment in the construction, operation, and maintenance of the needed facilities. The project was getting underway at the end of 2006.
Kibuye Power Project Rwanda (Lake Kivu Gas Extraction)	Power	TAF is providing US$500,000 to EAIF for support towards the establishment and operation of an Expert Monitoring Group to oversee, coordinate, and evaluate monitoring of potentially dangerous gas extraction activities associated with the construction of methane-fired power plants in Lake Kivu on the border of Rwanda and the Democratic Republic of Congo. The grant also will finance training of local technicians in these activities. By the end of 2006, terms of reference had been prepared and expressions of interest were being solicited.
Uganda 50MW Biomass, Uganda	Power	TAF is providing US$154,000 to EAIF for the funding of studies to advise Government and private sector investors and lenders on the feasibility of using bio-mass as a fuel as part of Government's efforts to encourage private provision of electricity in Uganda. Studies have been completed establishing project viability parameters, and by the end of 2006, negotiations were beginning.
Beira Land Development Co., Mozambique	Housing / industrial	TAF is providing US$430,000 to InfraCo for supporting activities associated with development of housing, infrastructure and flood protection in conjunction with an FMO-sponsored port rehabilitation and dredging project. Low-cost sand dredged from the shipping channel would be used for coastal protection and landfill in the city. The new land will meet a shortage in the area, and will be equipped with all utilities and sold in lots for social housing as well as residential and industrial development. The TAF grant enabled the solicitation of tenders for the technical studies which were issued in 2006. The TAF grant also established credibility with potential partners and other stakeholders and facilitated negotiations.
Chiansi (Chanyanya) Irrigation, Zambia	Agribusiness	TAF funding of US$400,000 to InfraCo is helping to finance studies and training needed to develop a user-owned water management company to construct, operate, and maintain an irrigation system needed to increase agricultural production and improve livelihoods of local residents. Initial surveys and studies have been completed. TAF funding has allowed the progression of the project from concept stage to actual initiation of development, and enabled development of a coordinated, cohesive approach among partners and stakeholders.
Eleme Petrochemical, Nigeria	Power	In support of private investment in the Eleme Petrochemical Plant, TAF is providing a US$74,500 grant to EAIF to help finance community development mapping, a socio-economic baseline survey, a monitoring and evaluation framework, and stakeholder engagement in community development planning. This project was just getting underway at the end of 2006.

TAF Case Study

Chiansi (Chanyanya) Smallholder Irrigation project

Zambia is a poor, land-locked country located in southern Africa with a population of 10.5 million people, growing at a rate of almost 1.8% per year. Average annual per capita income is about US$500, with over 73% of the population living below the poverty line. The majority of Zambians depend on agriculture-related activities for their livelihood, with agriculture and agro-processing accounting for more than 40% of the national GDP, and contributing about 12% of export earnings.

Despite agriculture's importance, only about 14% of the country's arable land is cultivated every year. This is partly due to a lack of year-round availability of water to the approximately 800,000 small holder farmers who control about four-fifths of the cultivated area. Rainfall is abundant during the 3 to 5 month rainy season, but a lack of irrigation opportunities restricts agricultural production for the remainder of the year. Abundant ground water and strong river flows are under-utilized and, of the 423,000 hectares of irrigable land, only 10% is irrigated, mostly by large sugar farmers.

The country's Poverty Reduction Strategy Paper (PRSP) and new government agricultural policy both emphasise the need for increased production, investment and commercialisation in the agricultural sector in order to ensure sustainable growth and poverty reduction.

TAF involvement

TAF is providing support to enable InfraCo to address improvements in agricultural production and irrigation in the Chiansi area of Zambia. InfraCo and local project sponsors are proposing to establish a water management company which would develop and own an 8.5km pipeline and other irrigation assets, maintain the system, and manage the distribution of the water. The principal sponsors are the local commercial farmers who have negotiated water rights to the area and are working with the small-scale sector growers, who in turn have also undertaken significant preliminary work in the area (with the support of USAID). The farmers are now seeking to complete project development and have signed Memoranda of Understanding with InfraCo to take the project forward.

In order to help it carry out its mandate to develop the project, InfraCo requested a grant from TAF to assist them in the carrying out of a number of activities, including:

- a preliminary engineering study;
- a strategic business plan;
- a legal review of contract and property rights;
- an Environmental Impact Assessment;
- a market study of sugar production and consumption in Zambia and the potential for export; and
- training for local farmers to strengthen their management and agro-business skills, and improve their proficiency in developing and operating the irrigation systems.

In October 2006, the PIDG approved a TAF grant of US$400,000 to be made to support this mandate and, by the end of the year, a number of tasks had already been completed including initial land surveys and engineering reviews, as well as the commissioning of soil tests. The remaining steps will build on the results of the work already undertaken in order to determine the optimal location of the farms, the resulting final layout of the irrigation system, and its design and costs.

Development impact

The support provided by TAF has helped bring together the ambitions of a number of disparate groups interested in improving agricultural production in Zambia – the public and private sector, large and small scale farmers, development agencies and the Government of Zambia. Crucially, the grant will facilitate the involvement of all stakeholders in the project, assuring that poorer smallholders have a place in decision making regarding matters affecting them economically, as well as socially.

It is estimated that the scheme will increase the current irrigated land in Zambia by 40,000 hectares (4%), significantly boosting local incomes and employment opportunities, and contributing to food security and export potential. The project will help subsistence farmers become more profitable by increasing their access to water all year round thus boosting their production potential, providing them with greater access to markets and more reliable contractual arrangements, and creating synergies with the larger commercial producers and processors in the area. Finally, there is potential for the project to be replicated in other areas of the country if it is successful, creating positive follow-on effects in agricultural production and poverty reduction.

4.5 Affiliated Programmes

4.5.1 DevCo

DevCo provides funds to help defray the costs of expert consultants who work with IFC-led teams in the poorer developing countries to prepare infrastructure projects for private sector investment. DevCo is managed by IFC's Advisory Services Department (CAS) with offices in Washington, Johannesburg, Dubai, Delhi and Hong Kong. Their relationship with the IFC enables them to leverage existing and similar work being done by the IFC

DevCo was established in June 2003 on the recommendation of the PIDG, with an initial capital fund of US$10.75m from the IFC and DFID. This budget has now increased to US$48.5 following additional commitments from the IFC and DFID, as well as contributions from DGIS, Sida and ADA. DevCo is a PIDG Affiliated Programme because, for reasons of cost effectiveness, it is funded through a designated Trust Fund at the World Bank. However, its funding base is made up entirely of PIDG members, and projects are subject to PIDG approval, making it, in all but name, a PIDG facility.

DevCo funds can be used to support:

- the marketing, planning and development of transaction mandates or project concepts, as well as covering small market studies;
- implementation support in the form of specialised consultants and/or staff resources; and
- partial underwriting of IFC risks associated with advisory mandates.

DevCo's mandate extends to any size of infrastructure project and covers all types of infrastructure including water and sanitation, electricity, telecommunications, transportation, housing and solid waste. As with all PIDG facilities, DevCo prides itself on focusing on the more challenging developing countries and infrastructure sectors.

By December 2006, DevCo had supported seven successfully completed advisory transactions which are expected to result in approximately US$1.8bn in private sector investment. In addition to these projects, DevCo is currently providing ongoing advisory support to a further eleven projects.

www.ifc.org/ifcext/psa.nsf/Content/DevCo

DevCo: Successful closed transactions

Project	Sector	Description
Moatize Phase 1, Mozambique	Mining	DevCo is providing US$0.5m for advisory services to assist the Ministry of Mining in the awarding of exploration rights for the Moatize Coal Mine. The development of the coal deposit near the border with Zimbabwe could lead to a 21 million ton per annum mine (ROM) and a 1,500 MW mine-mouth power plant, making a substantial contribution towards the sustainable development of the Zambezi Valley, while strengthening and diversifying the country's productive base. Agreements for the development of the mine were signed in 2004, with the project sold at a value of US$128m.
Toamasina Port, Madagascar	Transport	DevCo is providing US$0.6m for advisory services to the Government of Madagascar on the implementation of a PPP for the Port of Toamasina, the principal deep-water port. The concession was awarded to a private contractor in May 2005, with operations beginning in October 2005. During the life of the concession, it is estimated that over US$300m will be mobilised from the operations of the container terminal in the form of concession fees, royalties, and investments (see DevCo case study).
Polynesian Air, Samoa	Transport	DevCo provided US$0.8m for an advisory mandate with the Government of Samoa on the implementation of a private sector participation (PSP) transaction for Polynesian Airlines, the primary air carrier for the island of Samoa. In September 2005, the advisory transaction was concluded, further to the creation of Polynesian Blue, a joint venture between the Government of Samoa and Australia's Virgin Blue. Polynesian Blue will take over the previously loss-making long-haul international routes, while the restructured Polynesian Airlines will operate only regional local turbo-propeller flights. Private sector investment of US$5m was mobilised.
Nigeria Airports	Transport	DevCo provided US$1.5m in support for consultants to advise the Government of Nigeria on PSP in the Nigerian airport system. In December 2006 a concession for Abuja Airport was successfully competitively awarded to a joint Nigerian-foreign private sector consortium. The project is expected to generate investment of approximately US$370m, and will act as a pilot project for further transport concessions in Nigeria.
Kenya/Uganda railways	Transport	DevCo provided US$1m in support for an advisory project with the governments of Kenya and Uganda to design and implement a joint 25 year concession for the Kenyan and Ugandan railways. This is the first cross-border transport concession in sub-Saharan Africa. In addition, DevCo and TAF have agreed to support an SME linkages programme with the concessionaire to explore ways in which it could develop linkages with local suppliers for some of the inputs required to operate the railway. Over US$405m has been generated in private sector investment.
Philippines rural electrification SPUG I Masbate	Energy/Power	DevCo supported an advisory mandate worth US$0.7m with the Government of Philippines to introduce PSP in power generation in non-grid areas, such as remote islands. In September 2005, PSP was introduced by way of new power sales agreements between private-generators and electricity cooperatives responsible for distribution, with private generators being selected on the basis of competitive bidding. These agreements were achieved by divestiture of agreements between the National Power Corporation's Small Power Utilities Group (SPUG) and rural Electricity Cooperatives. The projects were concessioned successfully in 2005, with private sector investment in the form of concession fees of US$28m.
Philippines rural electrification SPUG II - Masbate	Energy	The Government of the Philippines wished to replicate the success of the first off-grid SPUG transaction to other islands in need of more affordable and reliable power. In December 2006, the Masbate Progress Power Consortium was announced as the winning bidder of a competitive selection process to supply cheaper and more reliable electricity to the isolated Philippine province of Masbate. All of the bidding consortiums were local and private sector investment is expected to be US$11.5m. DevCo provided support of US$0.35m.

DevCo: Summary of ongoing advisory support projects

Project	Sector	Description
Manila Light Rail Transit system, Philippines	Transport	DevCo has budgeted US$1.175m for advisory support to the Government of Philippines in organising an open, transparent and competitive bidding process to mobilise PSP to build, maintain and manage the extension of the existing Light Rail Transit Line 1 system in Manila. It is expected that investment of US$400m will be generated, with significant improvements in transportation links for the local population.
Madagascar airports privatisation	Transport	DevCo is providing support of US$0.9m, along with TAF, for an advisory mandate with the Government of Madagascar to design and implement public-private partnerships for up to 12 airports, including the international hub at Antananarivo (Ivato) which is the only national transport network.
Madagascar IPPs	Energy / power	DevCo is providing US$1.4m worth of support for an advisory mandate with the Government of Madagascar to invite private interest into the energy generation sub-sector by bidding out small Independent Power Producers (IPPs), including refurbishment, expansion, and greenfield transactions, for a total of up to 100 MW of additional capacity.
Cebu Philippines water	Water/ sanitation	DevCo is providing support for consultants fees to advise on the introduction of private sector participation in the improvement of provision of water services, focusing on the districts outside of Metro Manila. The project involves the supply of 50,000 cubic meters per day of treated/potable bulk water based on a 30-year concession, to the Cebu district which currently faces severe water shortages. DevCo is expected to contribute US$0.5m for the work, with estimated project costs of US$40m.
Vietnam IPP	Energy / power	DevCo is supporting a consultant to advise on mobilising private participation for greenfield electricity generation projects in order to bridge Vietnam's formidable energy supply-demand gap and cater for increasing demand for electricity over the next decade. DevCo's contribution is expected to total US$1.8m.
Kenya Telcom	Telecoms	DevCo is supporting consultants to advice the Government of Kenya on the implementation of PSP in Telkom Kenya Ltd (TKL), the fixed line telecoms company in Kenya, via the sale of a 26% stake with management control to a strategic investor, to be followed by a 34% IPO on the Nairobi Stock Exchange. DevCo's support is expected to total US$1.25m.
RwandAir Express, Rwanda	Transport	DevCo is providing advisory support to the Government of Rwanda to identify strategic options for the privatisation of Rwandair, the national Rwandan airline, and to execute a transaction in line with the most appropriate option. DevCo funding earmarked for consultants is US$100,000.
SafariCom, Kenya	Telecoms	DevCo is supporting consultants to advise the Government of Kenya on the structuring and implementation of a sale of a 9% share of Safaricom, a major local cellular operator that is partially owned by TKL.
Bangladesh IPP power	Energy	DevCo is contributing US$1.1m for an advisory mandate to the Government of Bangladesh on the design and implementation of one baseload gas-fired 450MW IPP project. The mandate was signed with the Government's Ministry of Power, Energy and Mineral Resources in December 2006.
JIRAMA Madagascar	Water and Energy	DevCo is supporting an advisory mandate with the Government of Madagascar on the design and implementation of a PPP for JIRAMA, the national power and water utility. The mandate was signed in July 2006, and it is expected that DevCo's contribution will total $1.65 million.
Philippines rural electrification SPUG II - Mindoro	Energy	The Government of the Philippines wished to replicate the success of the first two off-grid SPUG transactions to other (less remote) islands in need of more affordable and reliable power. A transaction for the island of Occidental Mindoro will be launched in early 2007.

DevCo Case Study

Madagascar Port project

Madagascar is the world's fourth largest island, located in the Indian Ocean off the coast of Mozambique. The Port of Toamasina is the principal deep-water port in the country, handling approximately 90% of all container traffic in Madagascar, and 80% of the country's international trade. The port is connected by rail with Antananarivo, the capital city. The port area had been largely untouched since independence in 1960, in spite of significant increases in demand (container traffic increased from 26,500 TEU in 1992, to 102,000 TEU in 2004, representing an average yearly growth of more than 11% per annum).

DevCo involvement

In November 2003, the Government of Madagascar appointed the IFC for advisory support on potential private sector participation in the Toamasina Port. The objectives were to develop private sector participation in order to:

- develop a new container terminal to increase capacity;
- rehabilitate existing assets; and
- implement a transaction for the port.

In 2004, DevCo provided US$650,000 in funding for advisory services to the Government on the selection of a private sector operator for the container terminal. The TAF also supported the project through a grant of US$320,000.

Following a highly-competitive and transparent bidding process, in May 2005, International Container Terminal Services Inc. (ICTSI) of the Philippines was selected as the winning company to manage the port. The winning bid was selected on a single transparent financial criterion consisting of the highest royalty fee per 20-foot container handled.

ICTSI will enter into a 20-year concession for the operation, management, financing, rehabilitation, and development of the container terminal on a PPP basis. During the life of the concession, it is estimated that over US$300m will be mobilised from the operations of the container terminal in the form of concession fees, royalties, and investments.

Development impact

Since ICTSI's take-over of the operation of the port in October 2005, there have been significant capital investments to streamline and modernise the operations. An equipment training programme has been launched for the terminal operations and maintenance staff, and a new IT system implemented to manage logistics, productivity and billing and invoicing. The project has now also established direct links with the Customs Department to improve efficiency of the port.

Small Scale Infrastructure Providers

DevCo has recently expanded its operations to include a sub-programme focused on small-scale infrastructure service providers.

Infrastructure services for the poorer sectors of the community in developing countries are frequently provided by small-scale operators such as water vendors and community level electricity providers. These small-scale providers often experience considerable problems in accessing financial services to enable them to launch and/or expand their activities.

In 2005, a feasibility study was undertaken to examine the financing needs of such providers, which concluded that work could be done to bridge the gap in their financing requirements. As a result, in early 2006, the Small Scale Infrastructure Provider (SSIP) window was created. The SSIP window supports technical assistance and advisory services to encourage the development and expansion of small scale infrastructure providers through a series of country level programmes, focused on small-scale transactions in secondary and tertiary towns. These programmes will initially be focused on the sub-Saharan Africa region. By the end of 2006, four projects were in development, with implementation expected to begin in 2007.

This innovative new sub-programme will be instrumental in extending support to smaller infrastructure service providers who often serve the poorest sections of society, and typically face the most stringent constraints to accessing private sector finance and expertise.

SSIP Activities to date

Project	Sector	Description
Uganda water	Water and sanitation	ADA is providing financial support for an SSIP project in the water supply sector in Uganda. The target of the project is to provide water for an additional 45,000 people. The project will work alongside existing GPOBA and GTZ (German development cooperation) programmes in the sector.
Uganda electricity	Power	A diagnostic study carried out by DevCo identified four electricity sector SSIP projects in Uganda. Implementation plans for these projects, which have a target of providing 15,000 new connections, are under ongoing assessment following recent policy changes by the Government of Uganda.
Tanzania Water	Water and sanitation	SECO has approved US$1.6m of funding for an SSIP water programme in Tanzania. The final choice of towns for the programme is currently under consideration, and DevCo/IFC are still awaiting decision from the local water and sanitation authority board on final advisory services agreement.
Madagascar Electricity	Power	In 2006, DevCo approved US$0.5m from the DFID non-core contribution in funding for an SSIP electricity project in Madagascar and is currently in discussions with other donors to provide the balance for the programme. The target for the project is 30,000 new connections over three years.

4.5.2 Global Partnership for Output Based Aid (GPOBA)

The GPOBA is a multi-donor trust fund established in 2003 to fund, design, demonstrate and document output based aid (OBA) approaches for the sustainable delivery of basic services to those least able to afford them. OBA involves contracting out service delivery to a third party, typically a private firm (but also where appropriate to public utilities, NGOs, and community-based organisations), under contracts that tie payments to the actual delivery of the services or 'outputs'. OBA uses explicit performance-based subsidies to complement or replace user fees, most commonly to address affordability concerns for particular groups of users.

The GPOBA operates through a trust fund at the World Bank, and currently has in excess of US$110m in donor commitments, currently all from PIDG Members and the IFC. However, unlike the other facilities funded by PIDG, it is hoped that GPOBA can be expanded to a broader funding base outside PIDG. Accordingly, although the programme operates under the PIDG umbrella as an Affiliated Programme, GPOBA does not follow the normal PIDG project approval processes, but has a separate approval system, which will involve all participating donors.

GPOBA funds can be used to:

- provide subsidy funding for output based payments;
- design pilot projects using OBA through technical assistance funds; and
- disseminate lessons learned and best practice.

Benefits of OBA approaches have included enhanced efficiency demonstrated through reduced subsidy payments, improved operating performance and better targeting of government and donor funding towards the poor.

By the end of 2006, GPOBA was active in 53 projects across Latin America, Africa and Asia, with over US$10.5m committed to technical assistance and dissemination activities, grant agreements amounting to US$10m for subsidies, commitments of US$17m for subsidies, and a further US$83m identified for potential subsidies. GPOBA projects can be found across all major infrastructure sectors including energy, telecoms, and water and sanitation. Full details of these projects and other activities can be found on the GPOBA website.

www.gpoba.org

GPOBA Case Study

Natural Gas distribution for low income families on the Caribbean Coast, Colombia

GPOBA is supporting a pilot project in Colombia to provide connection subsidies to link an estimated additional 35,000 families to the natural gas distribution network.

Colombia has achieved a large and rapid expansion in natural gas penetration in recent years, bringing major economic and social benefits to the urban population. This natural gas penetration has brought substantial benefits to the country, meeting basic household needs at about half of the equivalent cost for liquefied petroleum gas (LPG) or electricity. However, the key barrier that often prevents households reaping these benefits is the high cost of switching to the alternative natural gas, which amounts to about US$400 per household.

The government of Colombia has instituted a number of policy measures to facilitate access by low income users to the natural gas services and, as a result, about 86% of gas customers are now from the lower income households. However, the majority of subsidies in the sector continue to go towards the consumption of gas through a national cross-subsidy programme, a policy that has been recognised as an uneconomical use of subsidies. Granting connection subsidies instead of consumption subsidies would enhance the ability for low income households to switch at a fraction of the current subsidy cost. Poor households have not been able to afford the existing connection fee despite the local distribution companies offering financing plans of up to 6 years.

To address this inefficiency, GPOBA considered a proposal from Promigas, a local natural gas distribution company, to pilot a scheme that would test the viability of connection subsidies and foster a broader policy debate as to how to implement a shift towards this approach. The particular objective of the OBA scheme was to connect an estimated 35,000 low-income families to the natural gas distribution network. The natural gas would primarily be used for cooking at the domestic level, significantly reducing environmental deterioration in rural areas resulting from tree cutting for firewood.

In May 2006, a US$5.4m Grant Agreement was signed between the World Bank and Promigas, toward subsidy payments for household connections. The GPOBA subsidy will provide a 38% connection cost subsidy. The remaining connection cost will be financed through user contributions and six-year loans by Promigas.

The OBA subsidies will be targeted in line with ongoing social protection programmes and subsidies, following the stratified system defined in the Public Utilities Services Law. The target families belong to the lowest-income strata and subsidies will only be paid if new connections result in an ongoing service. The OBA project is being implemented by Fundacion Promigas, a social work foundation established by Promigas. So far, over 15,000 households have been connected through the OBA scheme. Output-based payments from GPOBA have not been disbursed yet, since a period of continued service delivery must be independently verified before payment is made, but are expected to be disbursed early in 2007.

4.6 Programmes and investment vehicles in development

4.6.1. Currency Liquidity Facility (CLF)

PIDG is considering the establishment of the CLF. The facility would be an innovative financial product, designed to mitigate foreign exchange risk in an efficient manner, thus promoting access to international debt markets for developing country infrastructure projects that do not earn foreign exchange and whose tariffs are not indexed to foreign exchange rates.

Traditionally, the usual way that such foreign exchange risks are mitigated is by indexing tariffs to foreign exchange rates, thus transferring all of the risk and economic cost to the off-taker and ultimately the consumer, pre-empting the use of scarce foreign exchange for other priority uses and disadvantaging the poor. While funding from local capital sources avoids the currency mismatch, these funds are by themselves insufficient to meet the infrastructure investment needed to meet the MDGs.

The CLF is designed as a standby, subordinated, revolving loan that provides funds to a project if, and only to the extent that, there is a shortfall in debt service caused by real currency depreciation beyond a pre-agreed band. The CLF would not provide support for any other risks. If and when the CLF needs to provide funds to the project, it becomes a subordinated lender and is repaid, with interest, from future project cash flows.

A feasibility study for the CLF was completed in May 2006, and further work on detailed design is being undertaken during 2007 through discussions with private sector banks, rating agencies and DFIs. If successful, it is anticipated that, initially, DFIs that already offer financing products to private sector infrastructure developers may offer the CLF as part of an overall financing package.

4.6.2. Asian Private Infrastructure Financing Facility (AsPIFF)

In 2004, PIDG supported a feasibility study to examine how it might help alleviate constraints to private sector investment in the provision of infrastructure services in the poorer Asian countries. A feasibility study on the need and possible structure of AsPIFF was completed in late 2005, and the facility is currently in its final stages of design. It is expected to become operational in 2007.

AsPIFF will be a developer of, and investor in, greenfield infrastructure projects, providing equity and quasi-equity investment products alongside other private and public sector investors. AsPIFF will consider projects in all infrastructure sectors, but will focus primarily on projects in challenging sectors with strong economic and developmental impacts, in the poorer countries of South and South East Asia. It is proposed that AsPIFF will have an initial equity investment capacity of US$75m, which will be channelled for investments in projects in the range of US$5m to US$75m. A key component of AsPIFF will be the need to have a local equity partner at the level of each project investment.


TN-74-A 5040


C.D.P
3503
UAA 654Q
120 HP

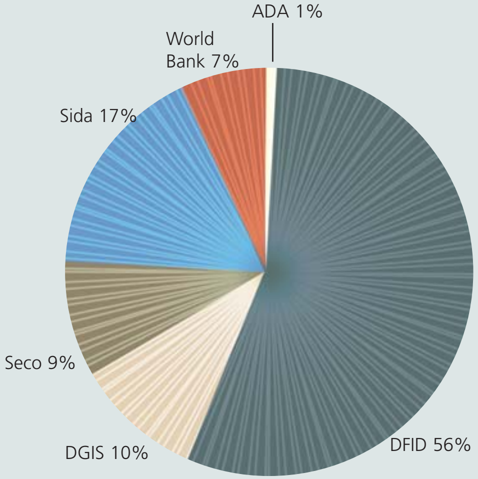
5

PIDG Funding and Resource Allocation

From PIDG's inception in 2002, members' funding commitments have grown to over US$350m to PIDG, Facilities and Affiliated Programmes. In turn, the investments of over US$227m by PIDG vehicles have led to the mobilisation of approximately US$2.6 billion in private sector investment, effectively leveraging PIDG members' funds by 11 to 1.

The reach of the PIDG vehicles' investments and transactions is clear, with over 53 projects in the water, energy, transport, telecoms, mining and agricultural and industrial sectors, and a global presence in over 25 countries.

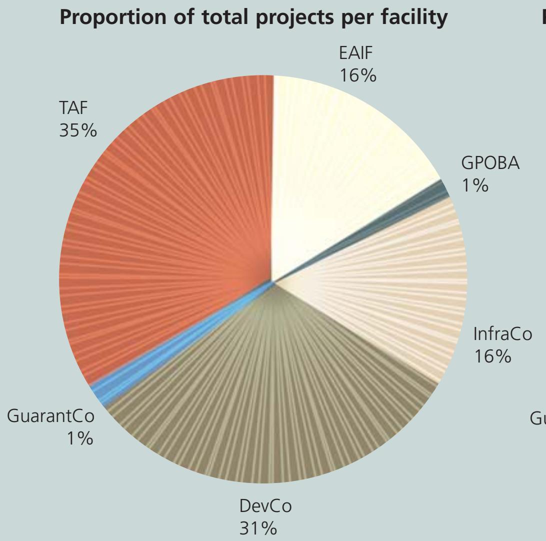
Proportion of PIDG funding by donor (including DevCo, excluding GPOBA)

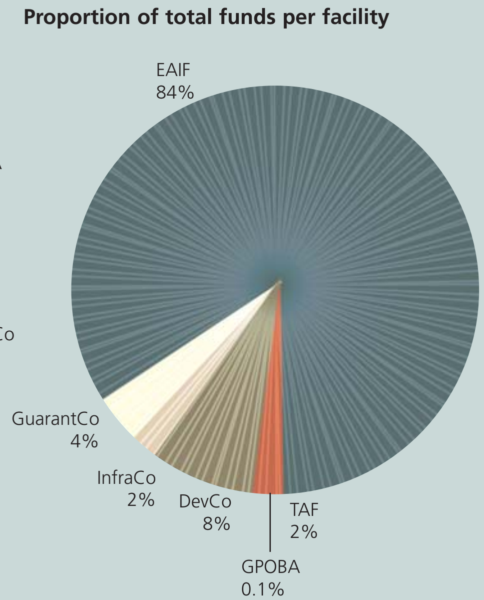


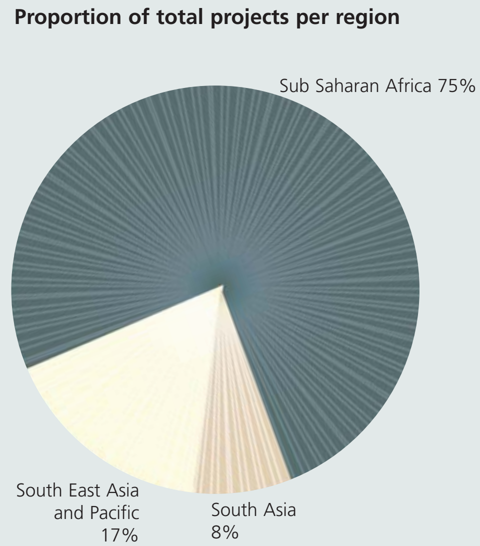
5.1. Contributions by Members

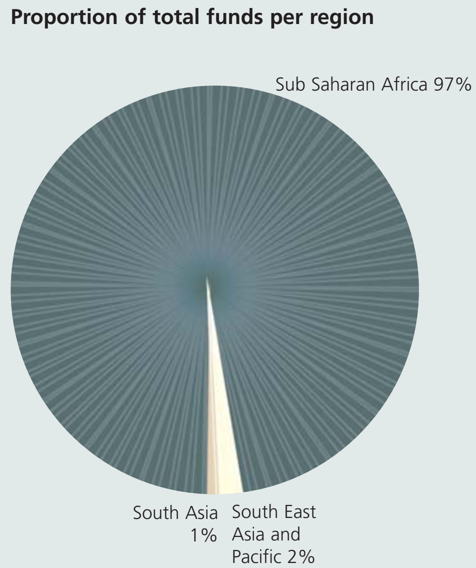
Contributions by PIDG Members to PIDG vehicles, administration and project development costs (US$m)

	DevCo	EAIF	GuarantCo	InfraCo	TAF	GPOBA	Admin	Project Development	Total per donor
ADA	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
DFID	31.43	60.00	25.00	10.00	2.71	45.00	1.11	0.12	175.37
DGIS	3.14	10.00	0.00	10.00	0.00	28.30	0.95	0.12	52.51
SECO	2.50	10.00	8.00	0.00	0.00	0.00	0.95	0.12	21.57
Sida	3.00	20.00	15.00	0.00	2.00	6.50	0.95	0.12	47.57
World Band Group	6.75	0.00	0.00	0.00	8.44	35.00	0.95	0.12	51.26
Total	**48.82**	**100.00**	**48.00**	**20.00**	**13.15**	**114.80**	**4.91**	**0.60**	**350.28**









5.1.1.PIDG activities by facility

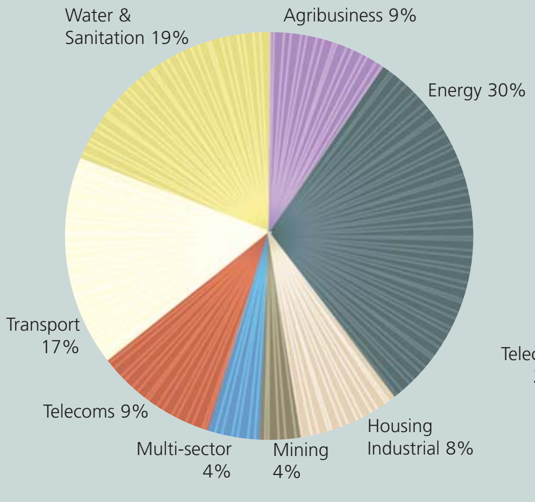
PIDG Activities by facility	Number of projects	Funds (US$m)
EAIF	11	281.8
GuarantCo	1	12.00
InfraCo	11	5.48
DevCo	21	26.22
GPOBA[11]	1	0.35
TAF	23	7.37
Total	**68[12]**	**333.22**

5.1.2. PIDG activities by Region

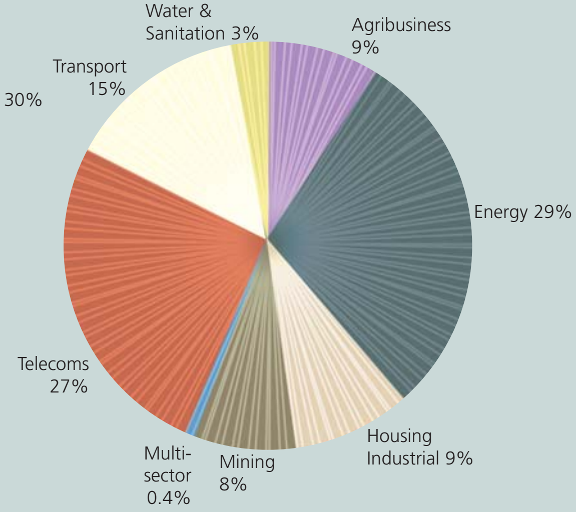
PIDG Activities by region	Number of projects	Funds (US$m)
Sub-Saharan Africa	40	324.43
South East Asia and Pacific	9	6.54
South Asia	4	2.25
Total	**53**	**333.22**

[11] Refers to a GPOBA project supported directly by the PIDG.
[12] A number of the projects are associated with more than one facility

Proportion of total projects per sector



Proportion of total funds per sector



5.1.3. By Sector

PIDG Activities by sector	Number of projects	Funds (US$m)
Agribusiness	5	30.9
Energy	16	98.25
Housing / Industrial	4	29.61
Mining	2	25
Multi-sector	2	1.22
Telecoms	5	88.7
Transport	9	49.44
Water & sanitation	10	10.1
Total	**53**	**333.22**

6 Annexes

6.1. Annex 1: DAC List of ODA Recipients

Countries eligible for PIDG support are those included in the first three columns of the Development Assistance Committee (DAC) List of Overseas Development Assistance (ODA) Recipients set out below (January 1, 2005). This list is published by the Organisation for Economic Cooperation and Development (OECD).

Least Developed Countries	Other low income countries (per capita GNI <US$825 in 2004)	Lower middle income countries and territories (per capita GNI< US$826-$3255 in 2004)	Upper Middle income countries and - territories (per capita GNI US$3256 $10065 in 2004)
Afghanistan	Cameroon	Albania	Anguilla
Angola	Congo, Rep.	Algeria	Antigua and Barbuda
Bangladesh	Côte d'Ivoire	Armenia	Argentina
Benin	Ghana	Azerbaijan	Barbados
Bhutan	India	Belarus	Belize
Burkina Faso	Kenya	Bolivia	Botswana
Burundi	Korea, Dem.Rep.	Bosnia and Herzegovina	Chile
Cambodia	Kyrgyz Rep.	Brazil	Cook Islands
Cape Verde	Moldova	China	Costa Rica
Central African Rep.	Mongolia	Colombia	Croatia
Chad	Nicaragua	Cuba	Dominica
Comoros	Nigeria	Dominican Republic	Gabon
Congo, Dem. Rep.	Pakistan	Ecuador	Grenada
Djibouti	Papua New Guinea	Egypt	Lebanon
Equatorial Guinea	Tajikistan	El Salvador	Libya
Eritrea	Uzbekistan	Fiji	Malaysia
Ethiopia	Viet Nam	Georgia	Mauritius
Gambia	Zimbabwe	Guatemala	Mayotte
Guinea		Guyana	Mexico
Guinea-Bissau		Honduras	Montserrat
Haiti		Indonesia	Nauru
Kiribati		Iran	Oman
Laos		Iraq	Palau
Lesotho		Jamaica	Panama
Liberia		Jordan	Saudi Arabia
Madagascar		Kazakhstan	Seychelles
Malawi		Macedonia, Former Yugoslav Republic of	South Africa
Maldives		Marshall Islands	St. Helena
Mali		Micronesia,Fed. States	St. Kitts-Nevis
Mauritania		Morocco	St. Lucia
Mozambique		Namibia	St. Vincent & Grenadines
Myanmar		Niue	Trinidad & Tobago
Nepal		Palestinian Adm. Areas	Turkey
Niger		Paraguay	Turks & Caicos Islands
Rwanda		Peru	Uruguay
Samoa		Philippines	Venezuela
Sao Tome & Principe		Serbia & Montenegro	
Senegal		Sri Lanka	
Sierra Leone		Suriname	
Solomon Islands		Swaziland	
Somalia		Syria	
Sudan		Thailand	
Tanzania		Tokelau	
Timor-Leste		Tonga	
Togo		Tunisia	
Tuvalu		Turkmenistan	
Uganda		Ukraine	
Vanuatu		Wallis & Futuna	
Yemen			
Zambia			

6.2. Annex 2 : Infrastructure contributions to meeting MDGs

Type of infrastructure	MDG 1: Reduce income poverty and hunger	MDG 2: Full primary education coverage	MDG 3: Gender equality in education	MDG 4: Reduce under 5 mortality	MDG 5: Maternal mortality reduction	MDG 6: Communicable disease	MDG 7: Environmental protection	MDG 8: Framework for development.
Transport – Local (Village to Township or Main Road)	Improvements to low-volume local roads and associated networks of village tracks/paths can significantly reduce poor farmers' transaction costs and expand their production possibilities	Village roads significantly affect school enrolment and attendance	Girls' attendance significantly increased by safer roads	Increases use of primary healthcare facilities and facilitates access to better water	Positively affects antenatal care and share of deliveries professionally attended		Care needed to maximise compatibility of engineering design with local environment	Work on local roads/ transport can generate much youth employment
Transport – Trunk (Beyond the Township)	Availability of competitive transport services on adequately maintained trunk network is critical to the effective participation of an area in national and international markets	Quality of link to regional centre significantly affects quality of teacher who can be attracted and his/her attendance.	Helps secure better quality of teacher	Vaccines/drugs supply, visits by more skilled health personnel and emergency evacuations.	Increases in-hospital deliveries and often critical when emergency obstetrics required	Important for drug supply and higher-level diagnostics care needed to avoid stimulating AIDS spread.	Great care needed in fragile ecological environments to minimise risks and compensate people who suffer.	Essential facility to enable area to benefit from international trade opportunities
Modern energy	Rural electrification often correlates with sharp increases in regional incomes and growth of non-farm activity. Reliability of modern energy supply strongly affects investment in, and competitiveness of, local enterprises.	Availability of modern energy increases enrolment and attendance rates, and home electrification raises time devoted to study.	Modern energy helps families release girls for school: less time collecting fuel-wood and water, and schools improved.	Sharply reduces indoor smoke pollution and impurities in water/food consumed, the two major mortality factors.	Reduced stress of household chores, and electricity improves medical services (hours, equipment, refrigeration)	Improved medical services, including from attraction of more qualified personnel	Reduces pressure on land resources (by moving water and reducing fuel-wood need), but care needed to avoid ill-effects of l arge dams.	Small quantities of electricity essential for use of modern ICT.
Telecom	ICT significantly improves the efficiency of most service-sector activities (including government) and can in particular reach poorer people with information of direct use for improving their economic situation	ICT helps expand and improve teacher training, and can make classes more interesting	ICT can make attending school more worthwhile by strengthening students' exam performance	Can promote better health practices and ensure timely availability of life-critical diagnostic info and drugs.	ICT enables efficient arrangements for emergency treatment	Reduce drug stock-outs and make efficient referrals to higher medical institutions	Record-keeping and retrieval services of importance for environmental protection	Essential to target for ICTs' supply, and for participation in international economic opportunities.

Type of infrastructure	MDG 1: Reduce income poverty and hunger	MDG 2: Full primary education coverage	MDG 3: Gender equality in education	MDG 4: Reduce under 5 mortality	MDG 5: Maternal mortality reduction	MDG 6: Communicable disease	MDG 7: Environmental protection	MDG 8: Framework for development.
Household water	Convenient, good water can substantially reduce morbidity and mortality, time spent fetching water, and enterprise interruptions, and improve nutrition, with significant effects on poor people's productivity	Good home water supply increases school attendance (especially by children with literate mothers) and increases learning capacity	More convenient home water supply facilitates release of girls for school and reduces absences due to sickness	Good home water supply greatly reduces child mortality, especially if mother is literate	Water improves general maternal health and deliveries	Clean water is important for disease treatment, and for formula milk (HIV mothers)	Crucial for meeting the household water target under this goal	Water improvement is much needed in least developed countries
Sanitation	Adequate sanitation sharply reduces illness and expenditure on medical treatment (itself a significant factor in poverty).	Good sanitation/ water helps attract good teachers	Good school sanitation and water facilities increase girls' attendance	Improved sanitation decreases child mortality and improves nutrition	Improved sanitation reduces maternal illness	Effective water disposal reduces malaria mosquito breeding	Crucial for meeting the sanitation target and combating urban environmental degradation	Sanitation is high priority in least developed countries
Water management structures	Irrigation and flood control structures can greatly increase incomes and nutrition levels of the poor if they are managed to maximise benefits to the community as a whole, and especially if they support production of labour-intensive crops		Less drudgery for women in obtaining water for household needs	More ample supplies of water for household use	adverse health made changes in water regimes	Care needed to avoid and operation of water- consequences of man- in protecting environmental resources	Sound planning, design related structures are key and accommodating growing populations	
Public markets	Reduce transaction costs for small producers and help ensure competitive prices for consumers	Make centre at which schools, etc. benefit from same good access	Help ensure clean food supplies					Makes centre for ICT-based activities

Table taken from: Willoughby, Christopher (2004), "Infrastructure and the MDGs", sponsored by DFID; http://www.oecd.org/dataoecd/22/31/36567911.pdf

6.3. Annex 3 : Contacts and links

Private Infrastructure Development Group (PIDG)
John Hodges, +44 (0) 208710 6736
pm@pidg.org
www.pidg.org

InfraCo Limited
Richard Parry, +44 (0)207 399 1680
info@infracolimited.com
www.infracolimited.com

GuarantCo Limited
Nick Rouse
+ 44 (0) 20 7815 2780
www.guarantco.com

Technical Assistance Fund (TAF)
John Flora
taf@pidg.org

The Emerging Africa Infrastructure Fund Limited
Nick Rouse
+ 44 (0) 20 7815 2780
emergingafrica@standardbank.com
www.emergingafricafund.com

DevCo
John Leber
+ 1 202 473 4437
jleber@ifc.org
www.ifc.org/ifcext/psa.nsf/content/Devco

Global Partnership for Output Based Aid
Patricia Veevers-Carter
+ 1 202 473 2163
gpoba@worldbank.org
www.gpoba.org

Links to relevant websites

UK Department for International Development
www.dfid.gov.uk

The Swedish International Development Cooperation Agency
www.sida.se

The World Bank
www.worldbank.org

Swiss State Secretariat for Economic Affairs
www.seco-cooperation.ch

Netherlands Ministry of Foreign Affairs
www.minbuza.nl

The Austrian Development Agency
www.ada.gv.at

Public Private Infrastructure Advisory Facility
www.ppiaf.org

Design: D.R. ink, info@d-r-ink.com
Printed by Jason Print and Design
All pictures PIDG and Facilities, except page 10 ©Sven Torfinn/Panos Pictures, page 31 ©Jacob Silberberg/Panos Pictures, page 47 courtesy of Promigas, Colombia, page 49 ©Daniel O'Leary/Panos Pictures.

Private Infrastructure Development Group