

WINTER 2008

# ENERGYUPDATE

POWERING ECONOMIC AND SOCIAL DEVELOPMENT THROUGH EXPANDED ACCESS TO MODERN ENERGY SERVICES

# MAXIMIZING IMPACT: MODELS FOR USAID ENGAGEMENT WITH THE PRIVATE SECTOR FOR CLEAN ENERGY DEVELOPMENT

#### LETTER FROM THE GUEST EDITORS

Private sector investment in the power sector has fluctuated greatly in the past decade. The optimism of the 1990's was tempered by the realities of the East Asian and Latin American financial crises, which saw private sector investment in developing countries' power sectors drop from US\$43 billion in 1997, to US\$15 billion in 2004. Higher profit margins have since spurred an increase in private sector investment, particularly in power generation, with total investments of over US\$50 billion in 2007. The current financial crisis will likely adversely affect these recent gains. Given this volatility, and the need for significant and sustained investment in developing country infrastructure sectors, public-private partnerships (PPPs) offer an attractive option for meeting infrastructure development objectives.

PPPs provide an opportunity to leverage USAID's development funds, complement the skills of USAID's typical development partners, and provide a basis for long-term commercial sustainability.

Private sector partners typically are motivated by corporate social responsibility (CSR) commitments, or by an opportunity to advance their business objectives with an experienced partner in new and emerging markets. Experience has demonstrated that partnerships can require significant management resources as both parties must adapt to the different cultures and competing objectives of the other organization. Early identification of mutually agreeable program objectives and selection criteria, coupled with a clear definition of roles and responsibilities, have proven to be effective strategies to mitigate some of these challenges.

USAID has also implemented several successful development programs working directly with private sector partners. Under the leadership of USAID Administrator Henrietta H. Fore, the Agency has set a goal to triple public private partnerships across all development sectors.

LETTER FROM THE GUEST EDITORS CONTINUED ON PAGE 2

#### IN THIS ISSUE

#### **MAXIMIZING IMPACT:**

## MODELS FOR USAID ENGAGEMENT WITH THE PRIVATE SECTOR FOR CLEAN ENERGY DEVELOPMENT

#### Catalyzing Private Sector Investment

3 0
Public Capital Stimulates Investment in Clean Energy
The India Alternative Bagasse Cogeneration Program
Partnerships Inspired by Corporate Social Responsibility
USAID and Banco Fomento de Angola Work Together to
Expand Electricity Access

#### **NEWS & EVENTS**

Mission and USG Staff Attend 2008 Infrastructure Development Workshop	10
Allen Eisendrath Joins EGAT Bureau's Energy Team	10
Gordon Weynand Joins Middle East Bureau's Office of Technical Support	11

## LETTER FROM THE GUEST EDITORS

#### **CONTINUED FROM PAGE 1**

This edition of Energy Update highlights the variety of ways which USAID has enabled private sector investment in the energy sector and explores different models that the Agency has used to partner with the private sector to achieve our development objectives.

The first two articles, from USAID's Office of Development Partners (ODP) and Chemonics, Inc. examine lessons learned from infrastructure related Global Development Alliances (GDAs) and other PPPs. An article from USAID/West Africa details support for the complex, multi-country West Africa Gas Pipeline PPP project, which helped to overcome barriers that had prevented the development of the project for years.

Projects designed to support the commercial interests of the private sector partners, such as USAID/India's support for cogeneration technology at sugar mills, and E+Co's business development support for clean energy small medium enterprises (SMEs), have been sustained and replicated once USAID support has ended. The CSR-inspired financial contribution of Banco de Fomento Angola in Angola has allowed USAID to increase the impact of existing development programs.

These examples demonstrate the impact that can result from public-private partnerships and the variety of different models which can be used. USAID is currently seeking new private sector partners to enhance our worldwide clean energy development efforts.

#### Jeffrey Haeni and Mary Morning Washburn

Guest Editors, Energy Update, Winter 2008
Energy Team, Office of Infrastructure & Engineering
United States Agency for International Development
Email: jhaeni@usaid.gov and mwashburn@usaid.gov

## FOSTERING INFRASTRUCTURE PUBLIC-PRIVATE PARTNERSHIPS

# THE GLOBAL DEVELOPMENT ALLIANCE – AN AGENCY PRIORITY

In 2002, after 27 years of civil war in Angola, a strong partnership was forged between USAID and Chevron that has since resulted in remarkable development success. Active in Angola since 1930, and the largest employer in the country, Chevron adopts a long-term perspective to address business challenges that overlap with development goals.

Through USAID/Angola's Agricultural Development and Finance Program (ADFP), Chevron has contributed US\$3 million and USAID has given US\$2.5 million over five years to strengthen linkages to produce, process and market selected agricultural crops. As a result, nearly 900,000 Angolans have been able to rebuild their lives after their agricultural-based economy had been devastated by the war.

USAID is engaged in 50 such alliances that involve energy or include energy company partners. In these alliances, USAID has leveraged US\$480 million in private funding to \$320 million of USAID funding. USAID works with the private sector across every discipline and industry. Since 2001, the GDA, USAID's model for public-private partnerships, has capitalized on the Agency's existing relationships with private firms, NGOs, and foundations, to mobilize resources for development projects. GDA provides a strategic approach to alliance building by focusing on increasing the productivity of projects, augmenting the value of resources invested in a partnership, and adding to the long-term sustainability and strategic development impact of partnerships. To date, USAID has cultivated more than 680 alliances with over 1,700 partners, and has leveraged US\$9 billion in combined public-private resources.

Because of the benefits that partnerships can bring to development, USAID Administrator Henrietta H. Fore has challenged Missions and staff to triple the value of resources leveraged through alliances across disciplines and industry sectors. This goal seeks to deepen and expand the impact that foreign assistance has on social and economic development, and responds to the changing aid environment.

Today, between 80-85 percent of resource flows from the United States to the developing world originate with the private sector; only 15 percent comes from Official Development Assistance (ODA). Given the current global economic downturn, government engagement with non-traditional actors is of critical importance. Not only do these partners bring significant resources – expertise, creativity, capital – but they share in the risks and rewards of partnership. And alliances can achieve outcomes that no individual actor could achieve alone.

Learn more about USAID's Global Development Alliance <a href="http://www.usaid.gov/our\_work/global\_partnerships/gda/">http://www.usaid.gov/our\_work/global\_partnerships/gda/</a>

As the Agency increases the value of resources leveraged through alliances, the Office of Development Partners (ODP) guides Missions and Bureaus on new partnership development, implementation issues, and partnership evaluation. PPPs are challenging: they require significant management time, persistent staff, and clearly defined roles and responsibilities. Through an independent evaluation, the GDA recently found that partnerships should embrace business interests as the driving factors for reaching their development aims. Finally, ODP facilitates communication and knowledge sharing about alliances.

For more information, contact Robert Schneider, USAID Office of Development Partners, Email: roschneider@usaid.gov

## A TRANSFORMATIONAL DEVELOPMENT TOOL FOR CLEAN ENERGY DEVELOPMENT

Rapid urban growth generates significant demand for infrastructure investments in roads, energy, water and sanitation systems, solid waste collection and disposal, housing, and health and education facilities. The World Bank estimates annual infrastructure investment needed at 5.5 percent of developing countries' Gross Domestic Product (GDP) to keep pace with their projected growth. For lower income countries, the target is from 7 percent to 9 percent of GDP. Roughly half of this investment will be required for new infrastructure investments and the other half will go toward maintenance of existing assets.

The lack of basic infrastructure clearly constrains economic growth and poverty alleviation in the developing world. In recent years, developing countries faced with fiscal and capacity constraints have resorted to the implementation of public-private partnerships (PPPs) to help them reduce the infrastructure investment gap. Through PPPs, governments involve the private sector as a partner in the financing and long-term provision of infrastructure services. More than 130 countries have mobilized about US\$750 billion in infrastructure investments through PPPs.

Since 1990, USAID has played an important role in helping developing countries' efforts to implement PPPs. For example, USAID/Indonesia's Private Participation in Urban Services (PURSE) project designed and implemented the policy, legal, and regulatory framework to attract private sector investment in the water sector, and facilitated the signing of PPP contracts valued at nearly US\$1.34 billion in demonstration cities. USAID/Philippines' Build-Operate-Transfer (BOT) III program helped to make the policy and regulatory environment conducive to PPPs and strengthened Philippine government institutions' capacity to sustain the PPP program in the long term. The BOT III program assisted in developing 17 infrastructure projects worth US\$1.2 billion. In South Africa, USAID assisted the government in the establishment of a PPP Unit within the National Treasury, development of the policy and regulatory frameworks, establishment of a Project Development Fund, and in the implementation of demonstration projects. In Peru, USAID, through the PPP component of the Poverty Reduction and Alleviation Project (PRA), provided technical assistance to the Peruvian government in the design and implementation of three key PPP transactions in the transport sector, leveraging more than US\$700 million in private investment.

Thanks to USAID's involvement in these projects, several lessons have been learned and best practices developed on how to enhance the flow of quality PPP projects and maximize the chances for success. Below we summarize the most important lessons learned.

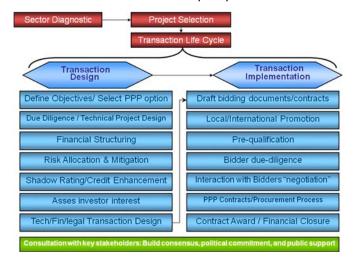
# Avoid ad hoc "one-off" approach of selecting and implementing projects

"One-off," in-and-out PPP transactions should be avoided in favor of multiple-project PPP programs backed by multi-year, in-country technical assistance for both institutional development and turnkey PPP project packaging, from concept definition to financial closure as USAID did in Indonesia, South Africa, and Peru. The design and implementation of multiple PPP transactions is the preferred course for the use of scarce technical assistance grant resources as it allows a country to achieve economies of scale as well as build institutional capacity. Technical assistance for a single "one-off" PPP project — the standard approach of multilateral development institutions — is very expensive and does not significantly advance host country institutional capacity. USAID has been able to build institutional capacity by engaging host country counterparts through a continuous stream of PPP project life cycle activities. USAID's engagements in the projects cited in this article exceeded 4 years in length with total investment between \$4-11 million over the project period.

# The Alpha-Omega approach: a transaction advisor engaged from the beginning to the end of the PPP transaction life cycle

A crucial lesson learned the hard way through the Indonesia PURSE Project is the absolute necessity for USAID and the transaction advisor to have prior agreement with the host government that both USAID and the TA will be engaged throughout the entire transaction life cycle. It is often the case for governments to say they need the transaction advisor support only during the design phase as they prefer to proceed alone to the transaction implementation phase. However, the transaction implementation phase entails very important activities, like the local and international promotion, bidding process, and interaction with pre-qualified bidders; if this phase is not properly carried out, subsequent steps in the process could lead to an undesirable result. For example, during the interaction with pre-qualified bidders' stage, bidders present questions/suggestions to the government and transaction advisor for clarification of aspects of the PPP transaction design and draft contract. Improvements or modifications are often suggested and may be considered and

accepted, rejected or modified by the government, and then communicated to all of the pre-qualified bidders.



Through this give-and-take process, the PPP transaction is further developed and refined, including the draft PPP contract, until the project is perfected to the satisfaction of both the government and the prospective PPP investors and operators. This due diligence and give-and-take process is critical to the successful development of PPP transactions and can take months to complete. Without proper transaction advisor participation, bidders could take advantage of the government's limited expertise and negotiate terms that are disadvantageous for the government.

Another reason behind the Alpha-Omega approach is that corruption is a reality, and particularly so with PPP projects involving large capital investments. By ensuring the presence of USAID and a transaction advisor "at arm's length" in every step of the PPP design and transaction process, the host government signals its uncompromising commitment to a transparent and corruption-free transaction process.

## Competition, competition, and more competition: PPPs by themselves do not guarantee lower prices or better services, competition does

Competition is the fundamental precept at the core of PPP implementation philosophy. The PPP involves the revolutionary concept of bringing private sector investment and expertise into the service of public institutions and public infrastructure that have been traditionally viewed as public goods and services, such as water, roads and energy. In such a circumstance, it is

essential that the public-at-large does not consider the private sector as a private sector monopoly substituting for an inefficient public sector monopoly. Accordingly, competitive tendering and the efficient management of the tendering process are essential to ensure the highest quality of service provision at the lowest possible price. For example, an aggressive local and international project promotion campaign led to a greatly competitive process for the concession of the Port of Callao's new containers terminal in Peru. Four world-class port operators were pre-qualified for this bid. The winning bidder — P&O Dover/Dubai Ports offered the lowest tariff index and an additional US \$144 million in investments on common areas within the port, in addition to the mandatory US \$218 million investment in civil works, plus the US \$255 million investment in equipment — gantry cranes.

# Efficient risk allocation and mitigation is essential to bring infrastructure PPP projects to financial closure.

In most developing countries broad-based international competition is hard to generate due to potential investors' perception of high risk involved. Perceived risks are manifold — poor sovereign ratings, absence or weakness of legal and institutional framework for successful PPP transactions, uncertainty about project's future revenues (demand risk), design, construction, and technology risks, probability of government subsidies' payment default — to name a few.

Because of such risk, PPP project design must be well structured to attract investors and/or operators who will share the risk among the government and prospective investors.

#### Conclusion

USAID projects that systematically apply lessons learned and best practices can successfully embark on a transformational program of infrastructure development. Through adherence to these PPP precepts, USAID can help developing countries reduce their infrastructure deficits. To assist developing countries in achieving the transformational impact inherent in public-private participation in infrastructure development, USAID

Risk Mitigation Mechanisms – Some Examples		
Demand Risk	<ul> <li>Willingness and capacity to pay surveys among services' users</li> <li>Tariff structures adjusted by inflation and exchange rate variations</li> <li>Minimum revenue guarantee (MRV)</li> <li>Revenue band guarantee (bidding criteria: Level of revenue risk assumed by the bidder under the MRG level established by the government)</li> <li>Variable term concessions (bidding criteria: Present value of revenues required to comply with contractual obligations)</li> </ul>	
Government payment defaults	Partial risk guarantees	
Changes in laws, regulations, and costs	Economic/financial equilibrium clause stating the conditions (i.e.: 5 percent variations in investment and operation costs), and the formulas and mechanisms for contractual adjustments	
Design, construction and operation risks	<ul> <li>Concessionaire assumes design risk, except in "critical areas" that present known geological problems</li> <li>Periodic maintenance cost insurance</li> <li>Construction progress certificates</li> </ul>	

needs to provide technical assistance through a PPP programmatic approach. This implies having a transaction advisor engaged throughout the entire Alpha-Omega transaction life cycle, promoting competition among international and local investors/private operators, and ensuring well structured transactions with efficient risk allocation and mitigation mechanisms.

For more information contact María Paula Vargas, Director, Latin America and the Caribbean, Chemonics International, Email: mvargas@chemonics.com

# USAID BROKERS MULTI-COUNTRY GAS PARTNERSHIP IN WEST AFRICA

A 2004 survey by the World Bank found that Nigeria flared more natural gas than any other country. The courts in Nigeria have ruled that gas flaring is criminal, and that by 2008 it must cease. As of this writing in 2008, flaring continues.

One solution is to convert flared gas into some sort of productive purpose. To this end, USAID is using clean-energy funds to support the West Africa Gas Pipeline (WAGP). The pipeline will transport about one quarter of the gas currently flared in Nigeria to electricity-generating plants in nearby Benin, Togo, and Ghana. Those plants will in turn reduce the amount of light crude and diesel they are currently burning, yielding a net reduction in the emission of greenhouse gases into the atmosphere.

The pipeline is the result of a public-private partnership. Chevron leads a consortium that includes major energy consumers in the subregion, especially key power utilities. On the government side are the four concerned governments of Ghana, Togo, Benin, and Nigeria through whose territorial waters the pipeline passes.

The partnership emerged when, in 1998 at the height of an energy crisis, the Ghana's then Minister of Energy approached USAID for assistance in brokering a complex regional deal involving four countries, two languages, and two entirely different legal systems. Experts from the American oil and gas industry were enlisted to help draft basic enabling documents, such as tariff methodologies and regulations on how gas producers would access the pipeline. Dozens of government officials participated in a series of workshops to reach consensus. The resulting treaty created a multi-country regulatory authority empowered to negotiate with the pipeline consortium for construction and operating rights. After years of planning, construction finally began.

The deal was extraordinary in many ways. For the first time in the subregion, governments agreed to cede regulatory authority to a regional body. The innovative performance standards specified that if production falls behind schedule, industry will pay penalties, though they also specify that if industry encounters delays in the

clearing of its necessary equipment and documentation through the ports, governments will pay penalties.

Construction has not always gone as planned. When a cargo ship improperly set its anchor and damaged the pipeline, USAID helped the regional regulatory authority and the pipeline company convene a series of seminars with key government officials, including harbormasters and maritime authorities, to address offshore pipeline security. The seminars were funded in record time under a partnership that included USAID's West Africa Mission, the USAID Office of Infrastructure and Engineering in Washington, and U.S. Embassy/Accra's Office of Security Cooperation.

Although the offshore pipeline is nearing completion, USAID's assistance to the energy sector in West Africa is set to continue, with attention increasingly turning toward secondary onshore pipeline networks that will bring gas to industry away from the coastline. Entire regulatory systems governing such things as rights of way, taxation, and pricing will require development. USAID will call upon America's considerable experience and expertise in the oil and gas sector, advising both industry and government to help put the requisite systems in place.

For more information, contact:

Dr. Jeffrey Cochrane, Chief, USAID/West Africa Trade and Investment Office, Email: <a href="mailto:icochrane@usaid.gov">icochrane@usaid.gov</a>

Dr. Frank Young, Vice President for Strategic Planning, Abt Associates, and former Director, USAID/Ghana, Email: Frank Young@abtassoc.com

Alain Rosier, Director for USAID's West Africa Gas Pipeline Technical Assistance Program, Nexant, Inc. Corporation, Email: <u>ARRosier@Nexant.com</u>

### CATALYZING PRIVATE SECTOR INVESTMENT

# PUBLIC CAPITAL STIMULATES INVESTMENT IN CLEAN ENERGY

Angel Ramon Conrado's job just got a little bit easier. As the head nurse at El Sol Health Center, Angel is charged with the responsibility of keeping the rural village of Carazo, Nicaragua, healthy. With the help of a few solar panels, Angel's health center now has electricity, which means office hours at night and refrigerated vaccinations for the villagers.

The center is powered by nine solar panels, which were installed by Tecnosol, a small clean energy business owned by local entrepreneur Vladimir Delangneau. In operation since 2000, Tecnosol cleanly powers more than 47,000 households, as well as several schools and hospitals. The company offsets 35,000 tons of carbon dioxide emissions by reducing the kerosene, candles and diesel generators the village uses, but Tecnosol is not a unique example of small businesses in Central America aiding in development efforts. Small and medium enterprises (SMEs) are the engines that drive social and economic development throughout the world.

Nowhere are the benefits of SMEs more apparent than in the clean energy sector. There is a marked absence of energy access in the developing world -- the second largest city in Tanzania, for example, has a surprisingly low 5.9% national grid electrification rate – and so alternative energy is critical. Solar home systems, solar cookers, hydroelectricity and more are all clean and available sources of energy that contribute to poverty alleviation and progress.

Currently, it is the local entrepreneur, the family-owned businesses, and the small companies that are providing these life altering goods and services. The results of these small and medium businesses are being seen worldwide with local entrepreneurs operating small clean and modern energy businesses while realizing positive financial results. In order to flourish though, these businesses need access to capital and business development services.



Solar energy powers the El Sol Health Center in Carazo, Nicaragua



A steady supply of solar powered electricity keeps vaccines refrigerated round the clock at the El Sol Health Center in Carazo, Nicaragua

### Establishing Clean Energy Businesses

One approach designed to develop SMEs focused on clean energy production and use is the enterprise centered business system, which combines adequately structured investment capital with hands-on enterprise development services. An important element of this model is the blending of public and private capital to provide business development services and financing to energy SMEs. Public funds are often necessary to overcome constraints in bringing the private sector into the sometimes riskier small-scale energy investments in developing countries.

Preparing the market for investment and growth through capacity building support services to entrepreneurs, and clean energy awareness initiatives is a valuable use for public funds. E+Co has found that on average, 30% of total project funds must be grants from donor institutions or foundations to support such capacity building efforts.

The "Increased Use of Renewable Energy Resources in Central America" (FENERCA) program helped support Tecnosol, and is an excellent example of the successful use of public funds to increase access to clean energy through the development of small and growing businesses. In 2000, USAID in partnership with E+Co, an organization that invests services and capital in energy enterprises in developing countries and the Biomass Users Network (BUN-CA), implemented the five year FENERCA program with the goal of fostering a policy, investment and entrepreneurial climate conducive to the development and investment in renewable energy.

This USAID support was crucial in building a pipeline for the now robust clean energy sector in Central America. Following the publicly-funded capacity building services to 112 clean energy businesses, E+Co provided investments sourced from private capital to the small energy businesses identified through the FENERCA program. In addition to Tecnosol, E+Co now supports 38 enterprises in Central America, generating 549, 436, 31 tons of carbon dioxide offsets and providing clean energy access to 257, 258 people.

For more information, contact: Tracy Smith, E+Co, Email: tracy.smith@eandco.net

# THE INDIA ALTERNATIVE BAGASSE COGENERATION PROGRAM

Biomass cogeneration projects using renewable fuels are environmentally friendly and carbon-neutral, in contrast to coal-fired power generation which is a source of high levels of particulates such as sulfur, nitrous oxides and other greenhouse gases. As these projects are located in rural areas, they also help to both drastically reduce transmission and distribution losses. Every single MW of electricity fed from bagasse cogeneration project is equivalent to 1.67 MW fed by a coal-fired power plant. To encourage increased and efficient use of biomass and sugar cane waste

(bagasse) at sugar mills, USAID/India launched the Alternative Bagasse Cogeneration (ABC) program in 1995.

Support was provided in the form of grants and technical assistance to nine private sugar mills that came forward to invest in cogeneration. USAID engaged the U.S. Department of Energy's National Energy Technology Laboratory to provide technical assistance, supervision, training and performance evaluation, and the Industrial Development Bank of India to manage the project's investment-related activities.

USAID offered a conditional grant of US\$40,000 per Megawatt (MW) to the private sugar mills for installing and operating high-efficiency biomass cogeneration (the size of cogeneration plants ranged from 12 MW to 24 MW). USAID's commitment helped nine private sugar mills to achieve financial closure with the banks at commercial terms. USAID provided a combined financial assistance of US\$7.2 million for the nine projects and technical assistance and training worth US\$2 million to promote bagasse cogeneration in India. USAID's equity contribution was leveraged to generate an additional 20 times more in funds from local banks and project developers. The active participation of a number of local banks in lending to these projects helped to build the banks' capacity to understand the bagasse cogeneration business. The presence of engineering firms, equipment suppliers and banks also helped in ensuring continuity of the concept after USAID support ended.



Godavri Sugar's 24 MW bagasse cogeneration plant in Karnataka, India, Photo: Sandeep Tandon

The partners worked together to overcome the difficulties of project implementation. This included the hurdles of signing power purchase agreements (PPAs) with local state electricity boards with obsolete policies that discouraged private power from being fed into the grid. Power sector reforms in India encouraged local power production, and slowly one state after another has adopted power sector reform.

These USAID projects set a precedent by demonstrating a business model based on high-efficiency 270-day cogeneration using sugar cane waste and other biomass fuels. As a result of the USAID program, additional bagasse cogeneration capacity is being developed on

purely commercial terms throughout India. In 2003, when USAID assistance in this sector ended, the nationwide installed capacity of biomass and bagasse cogeneration projects stood at 381 MW out of which 195 MW was contributed by projects supported under the ABC initiative. Five years later, the total installed capacity has gone up nearly 4 times to 1,253 MW. Given that the current installed capacity of the total biomass/bagasse based distributed generation is only 20% of the total estimated resource, the potential benefits of more projects is vast.

For more information, contact Sandeep Tandon, Email: <a href="mailto:sandeep">sandeep</a> tandon@yahoo.com</a>

## PARTNERSHIPS INSPIRED BY CORPORATE SOCIAL RESPONSIBILITY

## USAID AND BANCO FOMENTO DE ANGOLA WORK TOGETHER TO EXPAND ELECTRICITY ACCESS

In late 2005, the USAID Mission in Angola and Banco de Fomento Angola (BFA) began to discuss how they could work together to improve the everyday lives of the Angolan people. In 2006, BFA and USAID agreed to jointly fund a project to increase electricity access in select neighborhoods in Luanda. The project is designed to expand economic opportunities for the neighborhoods and improve government services provided to the communities.

The Angola Electricity Support Program (AESP) is working with communities in Kilamba Kiaxi and Viana on the edges of Luanda, the capital city of Angola. BFA is a key partner in this effort, providing funds for community work and municipal capacity building. BFA is a Portuguese-owned commercial bank, based in Luanda. BFA is providing \$400,000 each year over a period of three years for the electricity project. According to BFA, the bank benefits from the USAID partnership by increasing its visibility in these growing neighborhoods and by cultivating neighborhood ties. BFA is providing the funds directly to USAID for the program because USAID staff has the experience and know-how to manage the activities.



An EDEL agent explains how to a customer how to read the new electric meter that was recently installed

Of the funds contributed by BFA, AESP has earmarked funds for the electrification of Subzona 18 in Kilamba Kiaxi and a pilot area in Viana, which will provide seed money for a community electrification fund. BFA funds have also been used for refurbishment of the technical department and computers for Kilamba Kiaxi and Viana municipalities. BFA has been very visible in the neighborhoods and with the municipal governments as a sponsor of the electrification activities.

AESP introduced Geographic Information Systems (GIS) to develop accurate, up-to-date maps of the area. The most recent cadastral maps in Angola date back to

1989. Up-to-date maps are essential for planning and managing municipal infrastructure. AESP is working with Angola's national electricity distribution company and the two municipal governments to fill the information gaps and plan for urban infrastructure. The financial support provided by BFA was used to conduct detailed household and SME surveys that complement and inform BFA market expansion plans.

The partnership with BFA has allowed AESP to expand its activities with the municipalities and the local communities beyond what USAID funding would allow. In return, BFA is gaining visibility and making deeper connections in these two communities as well as learning more about its customer base. AESP is being implemented by the Academy for Educational Development.

For more information, contact Mary Worzala, Director, Energy Programs, Academy for Educational Development (AED), Email: <a href="mailto:mworzala@aed.org">mworzala@aed.org</a>

### **NEWS AND EVENTS**

#### MISSION AND USG STAFF ATTEND 2008 INFRASTRUCTURE DEVELOPMENT WORKSHOP

Infrastructure issues have significantly increased in prominence over the past few years. Today, infrastructure projects often make up a substantial share of a mission's overall program budget and USAID staff is tasked with for developing and managing large infrastructure programs. In addition, in rebuilding countries, USAID needs to coordinate efforts with both the military and other multilateral donors. In order to design, contract, and manage infrastructure programs effectively, USAID staff need training on a variety of topics including the approaches, tools, and financing mechanisms available for designing new infrastructure activities.

To respond to these needs, in December 2008, the Office of Infrastructure and Engineering (I&E) offered a five-day course on the design and implementation of infrastructure programs. EGAT Deputy Assistant Administrator William Hammink provided opening remarks. The course was attended by over 75 participants representing USAID Missions and Bureaus, the U.S. Military, the U.S. Army Corps of Engineers (USACE), U.S. Department of Health and Human Services (HHS), U.S. Department of Agriculture (USDA), U.S. Department of State, U.S. Department of Treasury, the Government of Egypt, and South African municipalities.

Topics covered at the workshop ranged from infrastructure development approaches to energy, Information and Communication Technologies (ICT), transport, water, and sanitation to military support for essential services.

The presentations and supporting materials disseminated at the workshop include a number of toolkits developed by I&E and will become the basis for a library of resources on this topic. If you would like a copy of workshop materials on flash drive, please email Ellen Dragotto at <a href="mailto:edragotto@usaid.gov">edragotto@usaid.gov</a>. Flash drives will be distributed on a first come basis while supplies last.

Due to the overwhelming response and positive feedback from the participants, the Infrastructure Workshop will be offered again in 2009.

# ALLEN EISENDRATH JOINS EGAT BUREAU'S ENERGY TEAM

Allen Eisendrath is the new Energy Team Leader for The Office of Infrastructure and Engineering (I&E). Allen has been working with I&E for over three years and specializes in electricity sector restructuring, corporatization and privatization, electricity markets, and regulatory issues. He has worked in energy sector reform in 16 countries over the past 20 years. Recently, Allen has provided support to USAID energy programs in Afghanistan, Central Asia, and Jordan. The Energy Team welcomes Allen to his new position and looks forward to working with him.

## GORDON WEYNAND JOINS MIDDLE EAST BUREAU'S OFFICE OF TECHNICAL SUPPORT

Gordon Weynand, former Energy Team Leader with the Office of Infrastructure and Engineering, has joined the Middle East Bureau's Office of Technical Support. As the Senior Energy & Environment Officer in the Middle East (ME/TS) Bureau, Gordon's responsibilities will include ensuring USAID Missions in Asia and the Middle East receive support from technical experts on energy and environmental policy, planning, and programs; and engaging with other U.S.G. agencies, international donors, and the private sector on energy and environmental priorities for the Middle East.

Gordon served as Energy Team Leader from 2002-2006 and was instrumental in the design and implementation of energy programs in Afghanistan and Liberia. Prior to this, he served as Acting Executive Director of the US-

Asia Environmental Partnership Program (US-AEP) in 2002. From 1998 through 2001, Gordon was Deputy Director of USAID's Global Environment Bureau's Office of Energy, Environment & Technology.

Before joining USAID, Gordon worked for six years on power sector restructuring, oil & gas sector reform, and nuclear safety, in Central & Eastern Europe and in the Former Soviet Union. He also worked for over 11 years in the private sector in the US oil & gas industry.

Gordon is currently on an Agency Long-Term Training Assignment at the U.S. Army War College, from July 2008 through June 2009. This assignment involves studies of military strategy and theory, and of interagency cooperation in the national security arena.

The Energy Team congratulates Gordon on his new position and wishes him the best in his future endeavors.