“Smart Development” Initiative

QUARTERLY PERFORMANCE REPORT
January - March 2008

Prepared for:
Energy Division—Energy Sector Governance Program
Office of Infrastructure & Engineering
Bureau for Economic Growth, Agriculture and Trade
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OBJECTIVES

USAID Strategic Objective and Intermediate Results

The strategic objective of the Energy Division is to improve the quality of life, increase economic growth, and promote sustainable communities by increasing access to environmentally sound energy and improving environmental management. And the intermediate result is increased production and use of environmentally sustainable energy.

Areas of special interest include:

- Improving policy, legal, and regulatory frameworks to establish necessary conditions of energy service delivery;
- Increasing institutional ability to provide or deliver energy management services; and
- Increasing public understanding of, and participation in, decisions regarding delivery of energy services.

CEE-UT Smart Development Initiative

The CEE-UT Smart Development Initiative fits well with the USAID objectives. We believe that enhanced public education on the basic principles inherent in the energy value chains and associated economics and technologies, as delivered through our New Era in Oil, Gas and Power Value Creation platform, can contribute greatly to improved energy sector performance worldwide.

Under the previous Energy Sector Governance grant, we worked with energy sector stakeholders in Ghana and established the Resource Center for Energy Economics and Regulation (RCEER) housed within the Institute of Statistical, Social and Economic Research (ISSER) at the University of Ghana – Legon. CEE-UT worked with RCEER to improve its capability to address public education and participation, as well as transparency needs for effective energy sector governance while also contributing to development industry analysis and regulations.

Shortly after its launch, the RCEER was hired by the Ministry of Energy to study the effects of deregulating petroleum product prices on the consumers. The RCEER followed a very successful model of combining its academic resources with outside experts and delivered the study in two months. The Ministry has been using it and also shared it, as we understand, with the IMF among others. The Ministry organized a workshop on petroleum deregulation where RCEER presented material developed together with CEE-UT. Although not scheduled activities under our grant, this study and the workshop helped the RCEER gain visibility and respect within the Ghanaian energy community as well as the public.

As part of the grant, the RCEER wrote a report on natural gas with two parts, a primer on fundamentals and a detailed guide to natural gas in Ghana; published a Guide to Electric Power in Ghana; held educational outreach activities associated with both of these products; developed university and professional course syllabi; initiated a database for the Ghanaian energy sector; and developed a sustainability plan. Much of what has been produced by the RCEER achieves goals established in our proposal for development of a “tool kit” that could launch and encourage the “smart development” process in Ghana.
The current cooperative agreement allows us to provide additional technical assistance to RCEER until it fully establishes itself and to work with RCEER and other partners in the region to enhance capacity to address energy sector problems facing the region. The most immediate topic of interest for the West Africa Mission remains the establishment of a natural gas market in Ghana, Benin, Togo and Nigeria in anticipation of the West Africa Gas Pipeline’s completion, which was originally scheduled for December 2006 but has been postponed until late 2007 and again until the first quarter of 2008. During the second half of 2005, the USAID Mission in Ghana used the TIPCEE project to develop a legal and regulatory framework for creating a natural gas market in Ghana. Dr. Asante, coordinator of RCEER, participated in the TIPCEE team. In the spring of 2006, the West Africa region started experiencing serious electricity shortages; the low level of water at Volta Dam in Ghana has been a main culprit. The completion of the WAGP and delivery of gas has gained further importance and urgency to provide opportunity to bring in gas-fired power generation to supply the grid. However, officials have been slow to finalize frameworks for maximizing the benefits of gas once it arrives. Accordingly, RCEER/CEE focus for FY06-FY07 has been on natural gas and gas-power linkages. In 2007, we started working more directly and extensively with an RCEER Advisory Board member and an NGO, Kumasi Institute for Technology and Environment (KITE) as the regional programs needed more detailed logistical support and new content on communication with different audiences, community relations and public participation, and energy and environment interactions. In FY08, natural gas and gas-power linkages across the region will remain central to our activities that are designed to build critical support for energy infrastructure investment and regulatory oversight. In particular, we will work with elected officials, professional staff assisting them, key news media, and leaders and long-term professional staff of the regional bodies (such as ECOWAS, WAPP, and others).

**Project Specific Activities**

Overall, there are five tasks in our cooperative agreement.

1. Continue work in Ghana with RCEER
2. Replicate the Ghana model elsewhere in Africa
3. Extend the Smart Development Initiative to Latin America
4. Conceptual and applied work to further define “Smart Development” variables and metrics
5. Capacity building for USAID

Tasks are not meant for simultaneous and continuous effort; guidance from USAID and Missions determine our focus. Accordingly, our work plan for FY06-FY07 focused primarily on Task 1, but had significant overlaps across other Tasks, in particular Tasks 2 and 4. We expect a similar focus in FY08.

Since late 2005, the regional considerations gained further support as mentioned before. In 2006, we focused on getting stakeholders in Ghana ready for natural gas and increased interactions with Nigeria. In 2007, we included delegates from Benin and Togo in our activities, which led to more interaction among sector professionals across the region to discuss issues associated with the WAGP. We also attracted participants from Côte D’Ivoire as the gas needs of the country raised their interest in the WAGP and associated developments in the region. In 2008, we will continue with the same regional focus, expanding our target audiences to elected officials, their professional staff, key media and regional organizations. The next section of this report will address the key activities implemented during the tenth quarter of our cooperative agreement to achieve our original objectives listed above with an increased emphasis on development of a natural gas marketplace and the resolution of the electric power crisis in West Africa.
During this quarter, CEE-UT developed its work plan for 2008, which was approved in early March. CEE has communicated extensively with the USAID, KITE, NARUC and other key parties in streamlining the activities for this year as outlined in the work plan. The coordination with NARUC is at its highest level; the work plan envisions CEE-UT and NARUC co-organizing events and sending delegates and resource people to each others’ events.

The work plan includes three tasks, targeted at elected officials, media and regional bodies: (1) background research on a variety of issues with potential impact on energy infrastructure investment; (2) regional educational events for target audiences; and (3) evaluations of the regional events and related components. The first activities in the work plan have already been initiated, as described below.

- We started planning the next event in the region. Activities planned for April 30 through May 2 include the following:
  - We are taking advantage of the first international conference of the Nigerian Association for Energy Economics, scheduled for April 29-30. CEE-UT is helping with organization of the event and will make key presentations. The conference will be a great opportunity for professionals from regional organizations (such as WAPP and ECOWAS) to enhance their understanding of regional and international energy trends and developments.
  - As part of the conference, we are organizing a half-day leadership session on April 30, focusing on investment implementation issues such as facilitating frameworks, political leadership for energy reforms, regulatory management, and the like.
  - A workshop on May 1-2. This workshop, following the NAEE conference will be focused on the practical applications of the implementation issues to be discussed in the leadership session (above) and will include case studies. This is an invitation only event that will create an environment of close interaction and discussion of select topics.

- No workshops have been held in this reporting period in the region. However, preparations have been going on for the next session of CEE’s capacity-building program "New Era in Oil, Gas & Power Value Creation." Although no participants will be attending the program through this agreement, key agencies from West Africa and other parts of the continent will participate. As of this report, we have 20 confirmed participants from Nigeria (NNPC, NPDC, various banks, Department of Petroleum Resources, small service and production companies), Ghana (National Petroleum Authority and Tamale Metropolitan Authority), Kenya (Electricity Regulatory Commission), and Cote d’Ivoire (Ministry of Water and Mines and SOGEPE).

- CEE-UT has started writing a case study on successful efforts in creating and operating investment boards worldwide and research on how these cases could be helpful in West Africa.

General

CEE-UT continues to house a page for the initiative within its web site to publicly disseminate developments: [http://www.beg.utexas.edu/energyecon/IDA/Smart_Development/](http://www.beg.utexas.edu/energyecon/IDA/Smart_Development/). Activity reports are available at this web site. Website statistics in the past quarter are provided below.
IMPACT

Achieved Impact

Key impacts achieved in this quarter were as follows.

- **Increased collaboration and support of industry professionals in the region.**
  - CEE-UT, NARUC and KITE are using the network of professionals established in previous activities to invite delegates from the new target audience for upcoming events. The NAEE conference is also being promoted through this network and offers, in turn, a locally developed opportunity for industry professionals to interact and to support local resource centers serving their needs.

- **Increased professional capacity and regional and international linkages.**
  - *University of Ibadan.* The NAEE, established as a chapter of IAEE under the leadership of faculty at the University of Ibadan, now has more than 50 paying members and is already organizing its first conference. CEE-UT is actively participating in the preparations for the first NAEE/IAEE conference titled “Developing and Supporting Critical Energy Infrastructure for Vision 2020: Challenges, Constraints and Prospects.” The conference will be held in Abuja, Nigeria on April 29-30, 2008. More than 100 have already registered for the event.
  - *Nigerian National Petroleum Corporation.* More than 10 delegates from NNPC and its divisions will be taking part in CEE-UT’s international capacity-building program "New Era in Oil, Gas & Power Value Creation", scheduled for May 12-23 ([www.beg.utexas.edu/energyecon/new-era](http://www.beg.utexas.edu/energyecon/new-era)). NNPC is a critical player in the region. The company is undergoing restructuring to become more commercially oriented and plays an important role in developing the domestic natural gas market in Nigeria and ensuring supply for the WAGP. Thus, they see their participation in New Era and similar programs in the region as critical to their capacity building. Also, representatives of Nigerian banks, smaller production and service companies, and a representative from the Nigerian Department of Petroleum Resources (DPR) will attend the program.
  - *Other agencies.* We hope to attract more key participants from the region to this program and other training events organized by CEE-UT. We also expect delegates from Ghana (National Petroleum Authority), Cote D’Ivoire (Ministry of Energy & Mines and SOGPE), and Kenya (Electricity Regulatory Commission).
  - *Ghana’s Energy Commission.* Mr. Joseph Essandoh-Yeddu (Ghana’s Energy Commission) continues to work with BEG on the CO2 project started during his last visit and with CEE-UT on natural gas research focusing on the developments in West Africa in general and Ghana in particular. The latter work would build on the research published in the *Oil & Gas Journal*, and help Mr. Essandoh-Yeddu fulfill his PhD requirements.
  - *Catholic University of Angola.* Although not under the current scope of the USAID agreement, CEE-UT continues to stay engaged in Angola, assisting the Center for Economic and Scientific Studies (CEIC) to develop a Master’s program on energy economics and management, a program highly desired by the industry that is suffering from a shortage of trained managers and employees.
  - CEE-UT has developed and submitted a proposal to EPA’s M2M program for a project in Nigeria in partnership with local partners. If successful, such a project will help develop local capacity in developing frameworks for reducing flaring and bringing clean energy to populations that previously lacked such services. It will
also help demonstrate to regional leaders the importance of allowing energy infrastructure to be built. No award has been made as of this report.

**Expected Impact**

- **Increasing professional capacity and regional and international linkages.**
  - The NAEE/IAEE conference in Abuja will bring together the energy economics expertise in the region and elsewhere in Africa, attract outside experts and help expose some of the energy sector issues facing the region. There will be a couple of panels focusing on international experiences with energy infrastructure investment and forming regional markets (e.g., power pools, pipeline interconnections), including the panel organized by CEE-UT. The NAEE will continue to organize similar events, including the 2012 international conference of the IAEE.
  - Following the NAEE conference, we will hold a workshop. We expect to attract key elected officials from WAGP countries, key representatives from the regional bodies (ECOWAS, WAPP, WAGPA, regional NGOs) and banking institutions in the region. Policy makers and local financial community have particular roles in creating an environment for investment. We also target leaders in the media, who are in positions of influencing public opinion.
  - CEE-UT will recruit additional delegates to attend its annual capacity-building program "New Era in Oil, Gas & Power Value Creation" which is scheduled for May 12-23, 2008. We will continue to work with our New Era alumni network in West Africa, who has been instrumental in our past programs in the region, to assist them with their research, education and outreach activities and access key decision makers for our activities.
  - Mr. Joseph Essandoh-Yeddu (Ghana’s Energy Commission) will continue to work with BEG on the CO₂ project started during his last visit and with CEE-UT on natural gas research focusing on the developments in West Africa in general and Ghana in particular.

- **Improved public understanding of natural gas industry fundamentals.** This expectation remains the same as in previous reports. The understanding of natural gas industry fundamentals and gas-power linkages remains low among the public and often policy makers. CEE-UT and its partners in the region will continue with their efforts to provide educational publications, seminars and outreach activities. Accordingly we continue to target key media members, but also reaching out to elected officials and regional bodies.
## Internet Statistics

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