

Procuring Energy Efficiency Services

Activity:	Procurement of Energy Efficiency Services
Location:	Egypt
Problem:	Huge public expenditures in energy costs due to outdated and inefficient systems
Solution:	Development of a replicable process to procure energy efficiency services and equipment using performance-based schemes within public procurement guidelines
Duration:	January 2005 - September 2006
Implementer:	Nexant, Inc.

Objective

The objective of this project is to develop, test, disseminate and scale-up a bidding process for energy efficiency transactions in the public and institutional sectors. The success of reaching such a replicable model will help procure affordable energy efficiency services to public facilities while creating investment opportunities for private capital as well as help further develop local energy service company (ESCO) markets and new contracting models.

Background

The Government and institutional sectors are often considered to be attractive market segments for commercial energy service providers, given their large purchasing requirements and generally low credit risk. A large portion of public sector facilities also tends to have relatively homogeneous end-use consumption patterns, which offers great potential for project replication and bundling of procurement contracts. However, in most developing countries, Government facilities are not actively pursuing efficiency measures due to budget constraints and other inherent barriers. Energy service companies (ESCOs) can offer attractive solutions to address this challenge through the use of performance contracting. ESCOs can carry the burden of raising the necessary capital investment for an energy efficiency upgrade project and receive payments

over time -- typically tied to the level of achieved savings. Despite these promising attributes, developing successful ESCOs in developing countries and/or energy efficiency transactions has proven challenging.

Activities

In early 2005, USAID funded an initiative to implement a pilot project in Egypt aimed at developing two replicable energy efficiency service procurement examples: one for a public building and the other for an institutional customer (i.e., a university). The idea is that inviting a full range of companies into a project through a competitive solicitation with flexible bidding options would allow the host facilities to select the best package of services the market would be willing to offer, rather than the more conventional approach of training ESCOs using pre-defined, Western-style business models and contracts.

Electricity consumption in Egypt in the public sector accounts for 12% of total consumption (including public lighting) costing the Government the equivalent of about \$177 million annually. Despite a number of previous donor programs to promote energy efficiency, the commercial services industry has remained fairly nascent. In order to build upon these past initiatives and improve deal flow for two



ongoing energy efficiency credit enhancement schemes, it was determined that this bidding process would be developed and tested in the Egyptian market.

As a first step, the contractor for this activity, Nexant Inc., conducted a market assessment to determine what types of services existing service providers were offering or willing to offer. The assessment provided 1) a review of the energy consumption in public facilities as well as the type of end-use applications that offer economically feasible opportunities to achieve efficiency; 2) supply-side assessment focusing on the ability of the existing service providers in Egypt to deliver the expected products and services, including financing and performance-based payment provisions, and 3) developing a list of potential service providers interested in participating in the pilot competitive procurement.

In parallel, Nexant considered a range of potential host facilities for this activity. Criteria included senior management interest and commitment to the process, level of energy consumption and efficiency potential, energy costs and other related factors. With these in mind, the USAID/Nexant team identified two projects host clients' for this pilot: the headquarters office tower of the Ministry of Water Resources and Irrigation (MWRI) in Cairo and the campus of the Arab Academy for Science and Technology and Maritime Transport (AAMST) in Alexandria. Memorandums of Understanding (MOUs) were subsequently signed with both

institutions and preliminary audits of each facility were conducted.

In addition to the market assessment, site selection and audits, the project will include the following activities:

- Development of a draft request for proposal (RFP), including Special Conditions, evaluation methodology, financing requirements, energy audit summary and findings, etc.
- Implementation of pre-bidding conferences for each RFP to discuss the procurement process with prospective bidders and better understand the requirements of the RFP. (The pre-bid conference for MWRI held in July '05 was very successful with representatives from 19 companies in attendance and 12 planning to submit proposals.)
- Technical assistance during bid package finalization, selection and contract award.
- Support during project implementation, particularly at commissioning to ensure project performance is as noted in the final contract.
- Monitoring of energy savings and dispute resolution.
- Additional capacity building and training support to ensure that future transactions could be carried out without the further provision of technical assistance.
- Dissemination of procurement process, results, lessons learned and recommendations for wide-scale replication.

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