



ENERGY EFFICIENCY FOR GOVERNMENT OFFICES - CONCEPT NOTE

Proponent:	Accra Metropolitan Assembly (AMA)
Potential Project Partners:	Cities Alliance, Energy Commission of Ghana, Ministry of Local Government & Rural Development (MLGRD), Ministry of Water Resources Works and Housing, Ministry of Energy, Ministry of Environment Science Technology and Innovation, World Bank, 100 Resilient Cities organization and the C40 Climate Leadership Group.

1. Project Background

Ghana, currently a lower middle-income country (World Bank's classification), is committed to becoming a middle-income country as per the Vision 2020 target (currently in revision with a new 40 year plan). This vision can only be achieved with increased access to energy and energy efficient systems and built environment.

In 2006, the Energy Commission of Ghana developed the Strategic National Energy Plan (SNEP) which defined the role of various energy sources in the country whilst setting targets for each 5 year period within a 15-year span. The targets were set for both the demand and supply sides.

A key target stated in this document, under the "Residential Consumption Targets" is "to introduce energy efficiency measures that can free about 5,000 GWh nationwide by 2015 expanding it to about 8,000 GWh by 2020". To achieve this requires urgent initiation steps towards improving efficiency through minimizing energy wastage in the distribution and consumption processes.

Cities Alliance through the Future Cities Africa Program, conducted a participatory Rapid City Resilience Assessment (RCRA) to assess climate change, environment and natural resource risks to inclusive growth with a draft report released in April, 2016. In this report it was stated that growth in the demand for electricity will hit 18000 GWh by 2025 (this demand figure includes T&D losses). Targeting commercial and office buildings with energy efficiency programs is sound and can make a material contribution to reducing energy demand and consequent adverse climate change impacts.

In 2014, the City of Accra became part of the 100 resilient cities, an initiative pioneered by the Rockefeller foundation. This partnership offers Accra the opportunity to improve urban resilience within the city and energy efficiency has been identified as a "quick-win" for conserving the scarce energy resources available.

In addition to the 100 resilient cities partnership, the city of Accra is a member of the C40 cities and as member, Accra continues to submit annual data on Green House Gas (GHG) emissions to the C40 climate leadership group. The city, managed by the Accra Metropolitan Assembly (AMA) continues to implement climate smart projects aimed at climate change mitigation and adaptation.





2. Project objectives

The general objective of this project is to demonstrate the benefits of energy efficiency through a program targeting Government Offices and Operations and through this provide a leadership role to the Accra municipality. It is expected that this demonstration will result in creating interest in energy efficient systems in the public and private sector. It has the potential of creating jobs, demonstrating transfer of technology and capacity building for local professionals in the energy industry.

The specific objectives are:

- identify potentials for energy efficiency in selected AMA public buildings by carrying out energy audits;
- enhance the capacity of AMA as an institution to develop an Energy Efficiency Strategy and Action Plan with short, medium and long term measures to reduce its energy burden;
- implement short term energy efficiency measures derived from the strategy in municipal buildings to serve as pilots
- share the results with other institutions for replication and awareness raising.

3. Planned activities

These will include:

- In-depth analysis of the energy context of AMA buildings in regards to energy management and use. In this context, the objective is to collect available data to observe recent trends in energy consumption, point out the abnormal levels of consumption as well as make the distinction between energy mismanagement and overconsumption due to obsolete equipment or building characteristics;
- Elaborate a strategy and action plan consisting on two approaches:
 - Zero or low cost measures such as energy reliable metering, verification of bills, energy managers training, staff sensitization and automatic switch-off;
 - More expensive investments, such as replacement of obsolete equipment (lighting bulbs, air-conditioners, window shades, etc.);
- Design a Pilot Energy Efficiency Projects program in municipal buildings, possibly based on carrying out energy audits in selected buildings;
- Design a financing scheme appropriate to ensuring the funding of the contemplated investments;
- Develop a communication plan to report on progress and share results with key stakeholders.





4. Alignment with relevant national and international activities

In 2014, the World Bank conducted a study to assist the AMA in the formulation of a long-term sustainable urban energy efficiency strategy (Open Energy Data Assessment, Accra, Ghana, World Bank, 2015). The planned activities by EUEI PDF build on the already gathered data by the World Bank which provide a good starting to design first interventions.

More generally, in order to ensure alignment and coherence of efforts, the project will aim for a wider stakeholder engagement. Key stakeholders on this project will include Cities Alliance, Energy Commission of Ghana, Ministry of Local Government & Rural Development (MLGRD), Ministry of Water Resources Works and Housing, Ministry of Energy, Ministry of Environment Science Technology and Innovation, 100 Resilient Cities organization and the C40 Climate Leadership Group, as well as international organizations such as the United Nations Development Program (UNDP), the African Development Bank (AfDB), the EU Delegation in Ghana and the Agence Française de Développement (AFD).

5. Partners

The project is implemented in collaboration with the Accra Metropolitan Assembly (AMA), with support from the EU Energy Initiative Partnership Dialogue Facility (EUEI PDF) funded by the European Commission and six EU member states. For more information, please see:



Accra Metropolitan Assembly (AMA)

www.ama.gov.gh



European Union Energy Initiative
Partnership Dialogue Facility (EUEI PDF)

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