# THE CASE FOR ENERGY EFFICIENCY & RENEWABLE ENERGY IN GHANA

The globalization phenomenon has created a lot of challenges and opportunities for businesses worldwide, as markets once closed are opening up at a fast rate. To take advantage of this and grow, Ghanaian businesses have to improve their competitiveness or run the risk of even losing their markets to more competitive imports.

One way of increasing competitiveness is in lower energy cost which can be achieved through the adoption of energy efficient technology and practices. Since energy like capital and labour is a direct cost, any reduction in energy cost has a direct impact on an organization's profitability.



Renewable energy sources like solar, wind and biogas are viable alternatives to petroleum based energy which have been increasing in prices worldwide.

In it incumbent on all energy consumers to explore how they can utilize renewable energy to help reduce their energy cost.



For further information as to how we can help you reduce your energy consumption and cost, contact

ENERGY FOUNDATION P.O. Box CT 1671, Accra, GHANA



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Saving Energy Today For a Brighter Tomorrow



## **WELCOME TO THE ENERGY FOUNDATION!**

The Energy Foundation Ghana is a non-profit, public-private partnership institution, devoted to the promotion of energy efficiency and renewable energy, as a key strategy to managing Ghana's growing energy needs in a sustainable manner.

## **OUR MISSION**

The Energy Foundation is dedicated to sustainable energy development and promotion of energy efficiency, through:

- · public education,
- policy advocacy,
- demonstration and promotion of technologies and management techniques that are used in the efficient production, distribution and consumption of energy; and
- the promotion of renewable energy resources.

#### SERVICE OFFERINGS

The Energy Foundation has the capacity and expertise to assist industrial, commercial and non-residential energy consumers to improve their energy management to reduce cost.



Services that the Foundation provides are as follows:

- 1. Energy Audits & Energy Management Strategies: Establishing the level of energy waste and identifying opportunities for its reduction. This includes: Technology improvement and management of power, lighting, air conditioning, water, gas, controls, etc. Organizing energy efficiency awareness workshops for staff on simple but effective housekeeping measures to help eliminate waste and reduce energy consumption.
- Power Factor Correction & Electrical Load Management: Analyzing the customers electricity consumption by installing power analyzer for a period of time to determine actual electricity consumption and power factor, and to recommend measures to reduce consumption as well as the sizing and

- installation of capacitor banks to improve the power factor to the recommended level to avoid surcharge penalty.
- Tariff Analysis: The Foundation has the expertise to analyze the tariff of customers and to recommend if they are in the correct tariff category or not.
- 4. Fuel Substitution: The Foundation recommends the most economical fuel substitutes for customers.
- Refrigeration & Air-conditioning: Energy
  Foundation has partnership arrangement with
  licensed Energy Service Companies (ESCos)
  who specialize in the above areas and have
  been trained by the foundation to evaluate
  customer's needs and make appropriate
  recommendations.
- Furnace: Assessing the efficiency of furnaces by installing gas analysers to monitor combustion rate and emissions of carbon mono-oxides.
- Boiler: The foundation in collaboration with its ESCos has the capacity to improve boiler efficiency by installing steam traps and scale prevention devices

## **ENERGY VAN SERVICE**

The Foundation maintains an Energy Van. This is stocked with the various measuring tools and equipment to provide energy management services to small and medium enterprises.

The Foundation now has the capacity to conduct on-site measurements and data analysis for quick and reliable energy audits to a larger number of companies. The Van is available for hire to energy services companies and consultants.



## **ENERGY MANAGEMENT TRAINING**

The Foundation provides energy management training in the following areas:

- Energy Audits
- Energy Management Options
- Energy Management Methods Industry
- Energy Management Methods Buildings
- Business Case for Energy Projects
- Renewable Energy



The Foundation has performed energy efficient solutions for a number of organizations in Ghana.