Promoting Energy Efficiency and Transformation of the Refrigerating Appliances Market in Ghana

Background

The project’s global objective is to reduce Ghana’s energy-related CO₂ and ozone depleting substance (ODS) emissions by mitigating the demand for energy in the country’s refrigeration in households encouraging recovery, recycling and/or disposal of environmentally damaging refrigerants. This will be accomplished through the introduction of energy efficiency measures and standards for refrigeration appliances and also through the creation of a turn-in and replacement program for inefficient appliances and the Ozone Depleting Substances (ODS) that they contain. The project activities will ensure that future refrigeration appliances meet acceptable efficiency, performance and environmental requirements in order to limit energy consumption and protect the ozone layer.

Many barriers, however, prevent the implementation of minimum energy performance standards and labelling which include:

- Lack of information by customers about the availability of energy efficient equipment and the cost effectiveness of investing in efficient appliances.
- Lack of sustainable financing mechanisms and systems for maintaining energy efficiency incentives, rebate and education programs.
- Uncertainty among local retailers about the market demand of high efficiency models and lack the capacity to market these appliances
- Lack of national experience and installations for testing household appliances according to international standards

By removing the barriers that currently inhibit the adoption of efficient refrigeration appliances and also allow Ghanaian households and businesses to reduce their energy expenditures while improving quality of life. Estimated annual energy savings will range from 30% to 50% depending on the success level of market transformation incentives and programs.

Objective

To improve the energy efficiency of appliances manufactured, marketed and used in Ghana through the introduction of a combination of regulatory tool such as Minimum Energy Performance Standards and Information Labels (S&L), and innovative economic tools. Domestic refrigeration appliances will be the first end-use appliance to be tackled, with a specific focus on addressing ozone depleting substances contained in the current stock of equipment.
Project Components

- Strengthen the institutional capacity and mechanisms for implementation of appliance energy efficiency standards and labels (S&L).
- Create and adopt national testing, certification, labelling, and enforcement mechanisms.
- Enhance consumer and retailer awareness through training and a national outreach campaign.
- Design, build, and commission a refrigerating appliance test facility.
- Establish used appliance and CFC collection/disposal facilities and services, and train the refrigeration industry in environmentally friendly disposal technologies and procedures.
- Conduct refrigeration appliance rebate/exchange program throughout Ghana with at least 50,000 efficient appliances distributed.
- Develop efficiency program evaluation and monitoring capacity, including pilot rebate and turn-in programs with monitoring and evaluation services contracted to qualified local professionals.

Executing Partners/Agencies at National Level

The executing partner/agency in this project is the Energy Commission of Ghana.

Project Budget

| GEF – US$ 2 million (including PPG and agency fees); Co-financing – US$ 4.4 million |

Progress

- Energy Efficiency S&L for domestic refrigerators has been adopted and the standards are enforced by both Energy Commission & the Ghana Standard Authority
- The testing, certification, labeling and enforcement mechanisms for the new energy efficiency regulation are in place.
- A national awareness campaign on appliance energy efficiency rating labeling.
- Launch of Pilot Refrigerator Rebate and Exchange Scheme on 19th September 2012.
- Procurement for the used appliances collection and disposal facilities has been initiated.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO Endorsement/Approval</td>
<td>May 2011</td>
</tr>
<tr>
<td>Implementation Start</td>
<td>July 2011</td>
</tr>
<tr>
<td>Mid-term Evaluation</td>
<td>January 2013</td>
</tr>
<tr>
<td>Project Closing Date</td>
<td>June 2014</td>
</tr>
</tbody>
</table>

Contact

UNDP
Benoit Lebot
benoit.lebot@undp.org