





# SWITCH AFRICA GREEN CASE STUDY # 3

STORIES FROM BENEFICIARIES

# PROMOTION OF BIOGAS TECHNOLOGIES



# **BIO-DATA**

Project Title: Promotion of Biogas

**Technologies** 

Grantee: Ghana National Cleaner

**Production Centre** 

Partner: None

Enterprise (MSME): Biogas Technologies Africa Ltd

Year Established: 2011 No. of Employees: 24

Sector: Renewable Energy sector
Type of Business: Waste-to-energy projects

Location: Tema

# **PROJECT BACKGROUND**

The promotion of biogas technologies project was implemented by Ghana National Cleaner Production Centre with technical support from the UNEP, UNOPS and the UNDP. The European Union provided for the implementation of this project which was aimed at solving the challenges associated with the management of liquid waste in homes, industries and commercial areas. The project worked with both private sector Micro, small and Medium Scale Enterprises (MSMEs) and Metropolitan, Municipal and District Assemblies

(MMDAs) in the Greater Accra Metropolitan Area. Through the project, training was provided for over 100 artisans who were taught the construction of biogas digester.

### **ISSUES ADDRESSED**

- The project was implemented as a result of the need to address the issues of sanitation while benefitting from the availability of biogas which is used for cooking and lighting both in homes and commercial areas.
- The problem of sanitation as a result of the faecal waste generated in homes are not properly addressed as the liquid waste are stored in septic tanks and dislodged when the septic tank is full which becomes an environmental problem. Hence the biogas technology is being promoted to ensure that the waste is treated on site whiles there are also alternative uses for the bi-products generated during the treatment.
- The bi-products are treated water which is rich in nutrients are used to water gardens and for farming and landscaping purposes. The biogas generated is used as a source of energy.

#### **PROJECT IMPACT**

#### **Environmental Impact**

- The biogas technology reduces greenhouse gas emissions as it captures the biogas which is rich in methane gas which is a major greenhouse gas.
- It also contributes to the mitigation of climate change effects as well as health impacts from improper handling of biodegradable organic waste.

#### **Economic Impact**

- As result of the training of the artisans which was done in collaboration with Biogas Technologies Africa Limited, jobs were created and this increased the income levels of the artisans
- Value added to the waste results in income generation as the products are packaged and sold for revenue.

#### **Social Impact**

- Health improvement and clean environment are some of the key benefits that the technology creates for its beneficiaries.
- There is also improved livelihood as incomes for the artisans increases resulting in good standard of living.
- The beneficiaries also make some financial savings which can be put into other uses.

#### CHALLENGES IN IMPLEMENTING THE PROJECT

The challenges with this project include slow response from clients and MMDAs who are key beneficiaries of this technology. However efforts were made to follow up on them to ensure that goals were achieved.

# **FUTURE PLANS/LESSONS LEARNT**

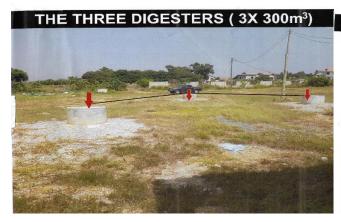
Advocacy will have to be increased to ensure that customers and the general public are made aware of the benefits of the biogas technology.

#### **QUOTES**

Dr. Bernard Boateng-Duah, CEO, International Maritime Hospital, GHAPOHA, Tema

"The hospital has a 3x300m³ (900m³) biogas plant planned, designed and constructed by the BTAL. This project has come as a big relief to the activities of the hospital. Since it is not taking care of our sewage but also bio-medical waste and that we also have energy from it to supplement the hospital's energy demand for cooking, refrigeration, lighting and laboratory gas demands. We hope it can be extended to other major hospitals not only in Ghana but throughout the African Continent."

# **PHOTOS**







## **ADDITIONAL INFORMATION**

For further information, please check on BTAL website; <a href="https://www.biogasonline.com">www.biogasonline.com</a>

# **CONTACTS**

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# **SUPPORTING PARTNERS**



# **IMPLEMENTING ORGANIZATIONS**

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