

TECHNOLOGY FACTSHEET

BIOGAS¹

Introduction

For the last fifty years, biogas technology has been promoted by the Government, international organizations and NGOs who have trained Kenyan technicians have built hundreds of biogas digesters in the country. However for some reason, the penetration rate of biogas technology in the country remains very low. Major constraints to biogas technology dissemination include:

- High initial investment costs compounded with lacking credit schemes
- Negative image caused by failed biogas plants

Limited private sector involvement

Technology Characteristics

Biogas is most commonly used for cooking and lighting. Slurry is largely used as manure and is appreciated by the users. The most widely disseminated plant in Kenya is the floating drum.

Biogas technology is a cost-effective investment if plants are properly constructed, effectively operated and well maintained.

Country Specific Applicability and Potential

Only an estimated 25 % of the installed biogas units in Kenya are operational, giving the technology a negative image.

The potential for agriculture is limited to agricultural areas with high population densities and is further restricted to farmers who can afford the high initial costs associated with biogas plants.

Status of technology in country

The use of LPG at homes, educational and health institutions has risen from slightly over 40 thousand metric tons in 2003 to 80 thousand metric tons in 2008(KIPPRRA, 2010). . It is

¹ **This fact sheet has been extracted from TNA Report – Mitigation for Kenya. You can access the complete report from the TNA project website <http://tech-action.org/>**

estimated that up to 2000 units have been installed in total, though it is impossible to estimate what percentage remain in working condition due to the dispersed and sometimes uncontrolled and informal nature of installations (SHELL, 2010).

Benefits to economic/social and environmental development

Savings on fire wood and charcoal purchases

Climate change mitigation benefits

Replaces use of firewood for cooking in rural areas.

Financial requirements and costs

Initial high investment costs. It costs about US\$ 800 to start a biogas plant.