



Why waste go waste and Case study of SBP biogas toilet project in Ghana

Mohammed Sani

SBP Bio Gas, Ghana



Abstract

The SDG goal 6, target 6.2 strives to achieve by 2030, adequate and equitable access to sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations. The key indicator for the target 6.2.1 measures the proportion of the population using safely managed sanitation services. In Ghana, the Unicef and WHO (2019) report estimate that 13% of the approximately 30 million Ghanaian uses unimproved toilets (unsafe and uncovered dugouts that allow flies access to excreta) and 11% (over 3 million Ghanaians) defecate in the open (along beaches, in gutters, alleyways etc). While measures are being outlined toward making Ghana an open defecation free country, scholars and practitioners are calling for innovative means to sustainably manage the faecal sludge of the proportion of the population with access to improved and limited sanitation services (uses shared toilet) between 66% (GSS, 2018) or 69% based on Unicef and WHO (2019). In line with a circular economy thinking, there is a growing demand for value addition of faecal matter such as b SBP BIOGAS, a local NGO is piloting the "Toilet Gas project" which uses decentralized bio-refinery and faecal sludge treatment plant to construct fitted biogas for households. This approach serves as suitable alternatives to solve the sanitation challenge in the country. The technology harness the methane gases generated from the faecal sludge for proper treatment and use for domestic activities such as cooking and for electricity. Currently, the development and installation of the technology ranges in sizes to meet the economic needs of everyone. The adoption of this project will improve the sanitation situation by ensuring proper management of faecal sludge, increase jobs through the training of local artisans, and prevent deforestation by providing alternative means of fuel for cooking to charcoal. The project will also help Ghana attain its National determined targets for Climate change, as less trees will be harness for charcoaliogas.

At St. Luke's Hospital in Chesterfield, Mo., the OR waste disposal process starts with readily-available red bags, says Joan Jenne, RN, BSN, CIC, infection control coordinator at the facility. Small and large bags are available in the OR and soiled-utility area. St. Luke's authorities contract with a service that picks up red bag waste; the materials are then sterilized and shredded before final disposal. To ensure bloodborne pathogen safety, bio-hazardous waste needs to be regulated. However, Jenne states, "Healthcare facilities as a whole need to be conscientious of the burden of waste.

When looking at and selecting products. There are so many factors to consider—patient safety, healthcare worker safety, and the end of the process, environmental safety." At Moffitt Cancer Center and Research Institute in Tampa, Fla., biohazardous waste is collected at the point-of-use site, including the bedside, exam room, OR suite, etc., says Tom Cayce, manager of environmental services at Moffitt. The containers are removed when they become full, or at set intervals during the day. The waste is taken to a soiled-utility room and placed into a larger movable container with a lid. These containers are removed from the soiled-utility rooms at predetermined times throughout the day and are taken to the containers of a regulated medical waste hauler. The Moffitt team recently audited its facility's waste stream when it partnered with Waste Management, Inc. "They took a look at our process to help us reduce bio-hazardous waste," Cayce says. "By reducing our bio-hazardous waste we have increased our general waste and in turn have found more opportunities to add to our recycling program initiatives." Cayce's biggest advocate in this process is a senior nurse and epidemiologist who helps him improve the system. At Moffitt, there is a great relationship between infection control and environmental services. This is an integral part of an effective waste removal program

Recent Publication

1. Ghana Statistical Service, (2018). Multiple Indicator Cluster Survey (MICS 2017/18), Survey Findings Report. Accra, Ghana: GSS
2. United Nations Children's Fund (UNICEF) and World Health Organization, (2019). Progress on household drinking water, sanitation and hygiene 2000-2017. Special focus on inequalities.

[11th Edition of International conference on Biofuels and Bioenergy](#), London, UK, March 23-24, 2020

Abstract Citation:

Mohammed Sani WHY WASTE GO WASTE A case study of SBP Biogas toilet project in Ghana, Biofuels 2020, 11th Edition of International conference on Biofuels and Bioenergy, London, UK, March 23-24, 2020