

BACHELOR OF SCIENCE (HONS) APPLIED CHEMISTRY, FACULTY OF APPLIED SCIENCE

ENT 600: TECHNOLOGY ENTREPRENEURSHIP NEW PROJECT DEVELOPMENT REPORT



BIOGAS SDN BHD "BIOGAS 3.0"

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EXECUTIVE SUMMARY

Biogas 3.0 is a product that can produce methane gas by using bacteria that can be a source renewable energy that can replace usual cooking gas. Product name Biogas 3.0 is a bio digester that placed anaerobic bacteria that will decompose organic waste without present of oxygen. In this condition the bacteria will decompose food waste, animal waste and plant waste and produce methane gas that release by anaerobic bacteria. This biodigester also not only produce methane gas that can replace cooking gas, it also can produce a fertilizer that can be used for farmer or gardener. This product already be invented by Israel and their product known as a Homebiogas, but by getting an idea from them we are trying to make a biodigester that more convenient and safer that can be use in rural area or hospitality sector. Before this their product just using a canvas and their product look like a balloon and for us this kind of form and material because the biodigester may be leaking due to scratch by animal and causes many consequences. Actually, this biogas already started been used at China and India in the 1970. Meanwhile in Malaysia this concept only been used by factory in order to produce their own electricity source. For example, at Jelutong there is company Sri Jelutong Biogas power plant. This power plant is using waste from palm oil to produce methane gas for combustion process in order to produce electricity for their own palm oil mill. So that, this renewable energy concept still didn't been use for household in this country but have been started at other country. Based from that, we are trying to invented this biodigester with improvement that we made to enter the market in this country.

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2.3.2 Product Design and Features

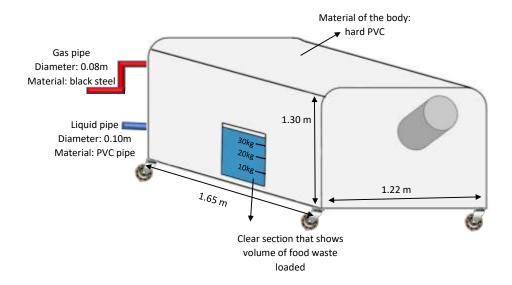


Figure 3: Biogas 3.0 3d design

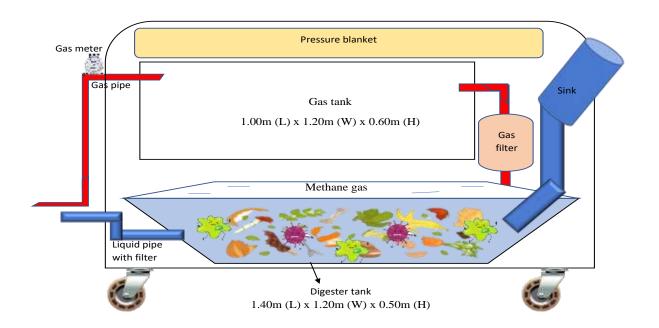


Figure 4: cross section of Biogas 3.0