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## Biogas Power- Hydrogen sulfide removal from biogas

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Biogas is a renewable energy source, similar to natural gas, which derived from renewable biomass sources, primarily via a process called anaerobic digestion. Anaerobic digestion is a process involving the breakthrough of organic matter by microorganisms, in the absence of oxygen. The main component of biogas is methane gas, which used as a fuel. It could be burned directly or used to run an engine that powers electrical generators, thus the production of electricity and heat. The paper intends to examine the production and use of biogas, with a focus on the most efficient use for electricity generation and heat from biogas derived livestock manure, determining optimum recovery rates of energy, describe option for connection to the electrical power grid, determine the profitability and viability of producing electricity and heat from biogas.

Energy is the gift of nature in various forms. The consumption of the energy is directly proportional to the progress of mankind. As the population, industrialization and standard of living increases, the global demand for energy increases significantly. Electricity is the most consumable form of energy all over the world. The primary source of energy is fossils fuel but the reservoir of fossils fuels are limited and extensive use may cause environmental degradation. Hence, it was always necessary to find an alternative to fossil oil. Today, it seems that we are in the middle of another oil shock and hence the need to find alternative sources, which need to receive more attention for, sustained energy supply.

There is a great deal of environmental pressure in many parts of the world to ascertain how livestock waste can best be handled. Livestock manure, like cow dung in the absence of appropriate disposal methods can cause adverse environmental and health problems such as: pathogen contamination, odour, air borne ammonia, greenhouse gases, etc. Anaerobic digestion has been considered as waste-to-energy technology, and is widely used in the treatment of different organic wastes, for example: organic fraction of municipal solid waste, sewage sludge, food waste, animal manure, etc. Anaerobic treatment comprises of decomposition of organic material in the absence of free oxygen and production of methane, carbon dioxide, ammonia and traces of other gases and organic acids of low molecular weight.

### Biography

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