

Woerden-Sales



BIO-GAS PAKISTAN

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OVERVIEW

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- About HoSt no 1 in waste to bioenergy.
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BIOGAS

- Biogas is clean environment friendly fuel.
- Biogas is generated when bacteria degrade biological material in the absence of oxygen, is a process known as anaerobic digestion.
- Biogas generally comprise of 55-65% methane, 35-45% carbon dioxide, 0.5-1.0 hydrogen sulfide and trace of water vapor.
- The heating value of biogas is about 60% of natural gas and about 25% of propane.
- Biogas has corrosive nature and storage of biogas is in not practical.
- It can be upgraded to natural gas, head and electricity.



WHY BIO-GAS

- Dealing with waste has become a nightmare for various people and societies for all over the world and no doubt brought about sanitation problems and pollution.
- Power has also become a major concern especially in the less privileged areas and under developing countries.
- Integration of these two problems would be a plus point for various communities.
- From Bio-gas various component can be powered by properly making use of the gas obtained. Less pollutant manure can be obtained Ultimately.



BIO-GAS PLANT BY HOSt IN NETHERLANDS



ABOUT HoSt No 1 IN WASTE TO BIOENERGY

- HoSt has become a major European supplier of bioenergy systems with over 25 years' experience, a large service team throughout Europe and a team of more than 100 engineers who design, construct and install our advanced bioenergy systems.
- The goal of our project development activities is to make a decisive contribution to the development of a bio-energy project, also for non-technical aspects.
- From 1999 onwards HoSt has been a fully independent business whose activities focus 100% on the technological development of waste-to-energy systems for the processing of biomass and waste flows and the supply of systems for the sustainable generation of energy from biomass and waste. HoSt has built up extensive experience in the processing of diverse waste flows from the food-processing industry and agricultural by-products such as straw, chaff and grass cuttings

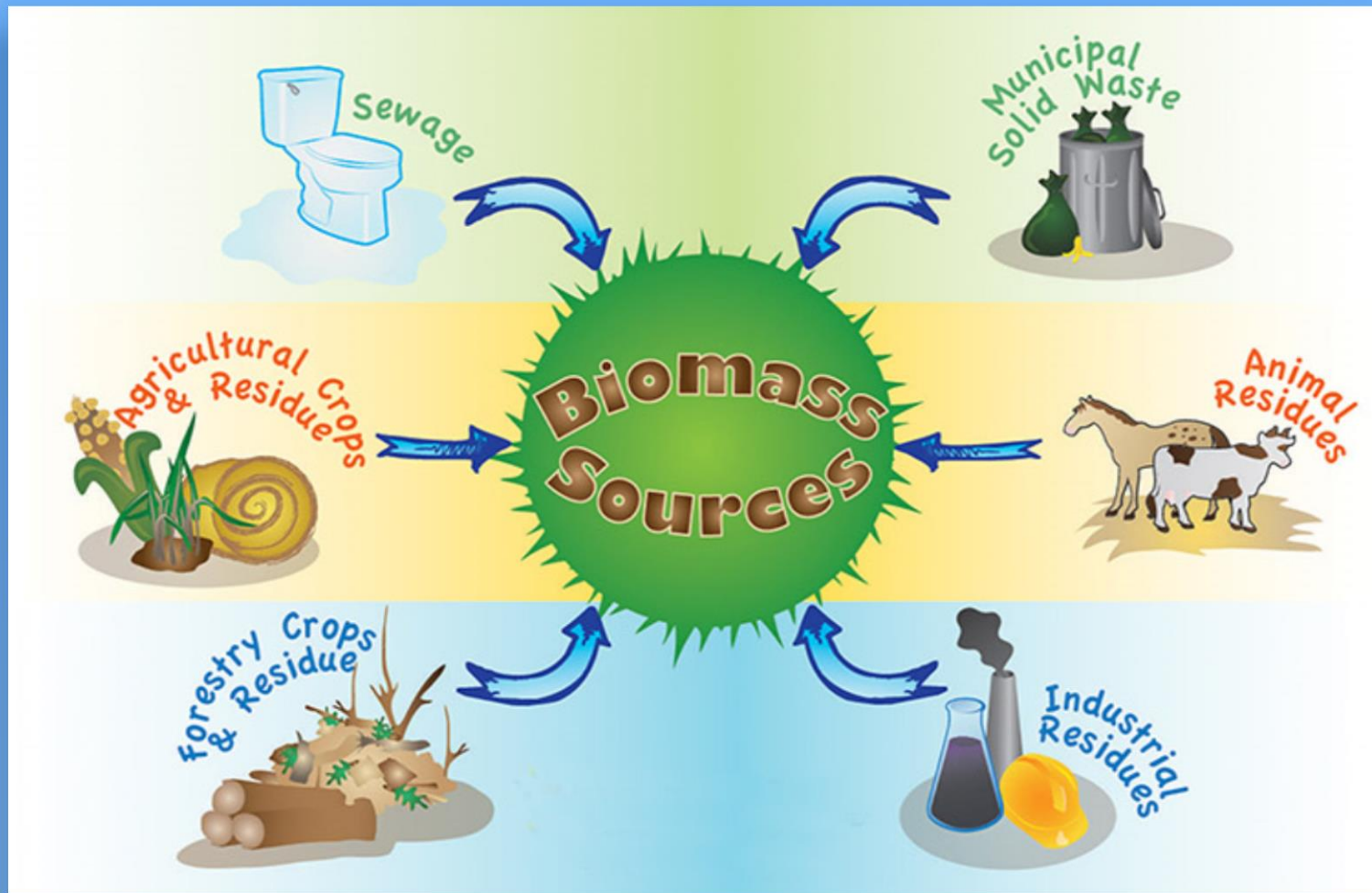


RAW-MATERIAL REQUIRED FOR BIO-GAS

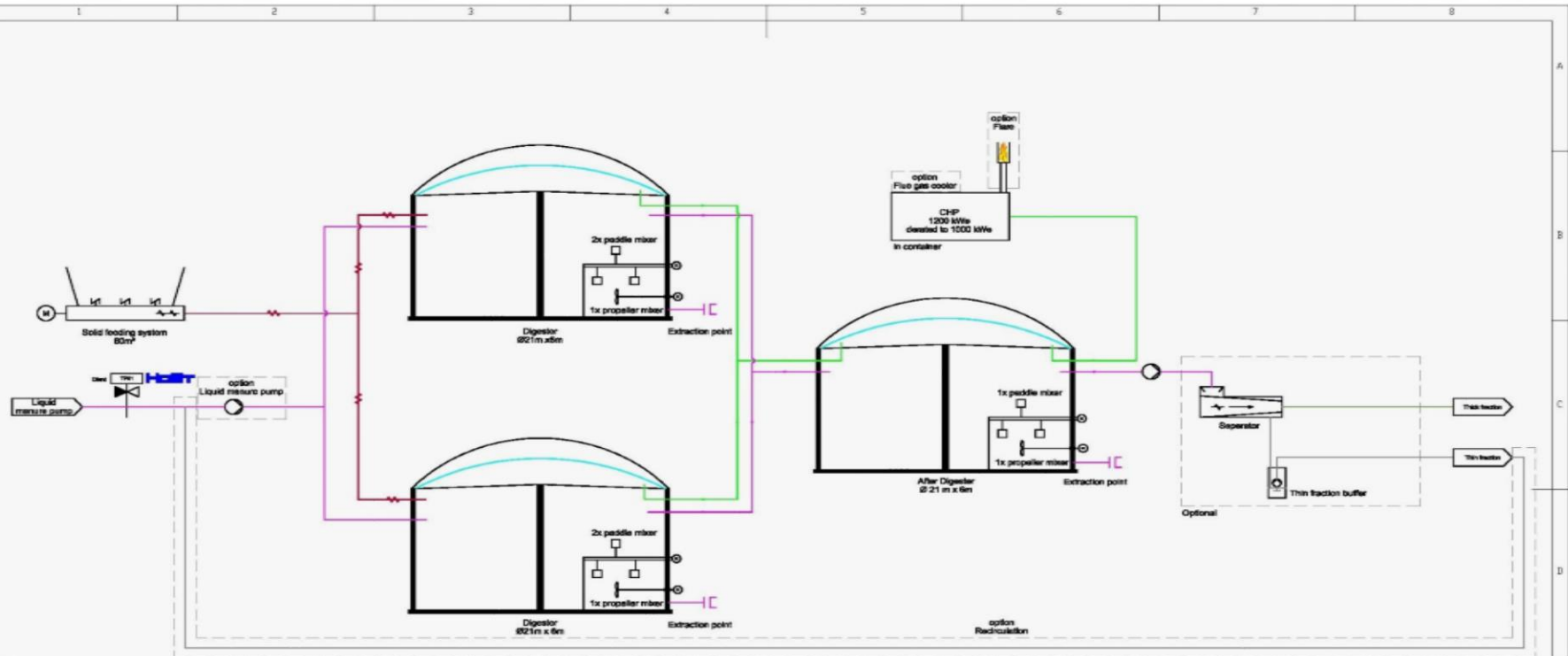
- Green waste (Animal Dung)
- Poultry waste
- Slaughter House (Waste)
- Vegetable and Food market waste
- Plant waste (Husk, grass, weeds, rice surplus straw etc)
- Domestic waste(Vegetable peel, food waste)
- Food restaurants and Food processing companies (waste)
- Industrial +water treatment waste (sludge)



BIOMASS



BIO-GAS PLANT



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01	KJD	2-8-2013	General update		WGR	MKL
Revised: Drawn by:		Date:	Description:		Checked by:	Approved by:
Title: PFD					Unless otherwise specified all dimensions are in: mm	
Project number: 3376			Client: 1 MW (concept)			
Drawing number: 3376-PFD01			Scale: A3		Sheet: 1 of 1	
Drawn by: EPE GRU		Approved by: MKL		Date rev 0 (preval): 12-11-2012		Plot date: 21-3-2014
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BENEFITS OF BIO-GAS

- Availability of power at affordable rates.
- Reduce pollution.
- Reduce time wastage while collecting firewood
- Reduce reliance on fossil fuels.
- Saves on the environment (Reduce deforestation).
- Reduces global warming.
- Produces good quality enriched manure to improve soil fertility.
- Effective and convenient way for sanitary disposal of organic waste. Improving the hygienic conditions
- As a smokeless domestic fuel it reduces the incidence of eye and lung diseases.
- Smog free environment.



LAHORE PAKISTAN

- Lahore is the capital city of Pakistani province Punjab, and is the most country's second most populous city after Karachi.
- Lahore has potential of bio-gas plant possibilities due to its markets condition and population.
- Lahore has poor sanitary system (WASA trying to upgrade it as soon as possible)
- Due to heavy traffic and industrial estate mostly in winter smog covered whole city
- LWMC and other companies are playing vital role to cleaning Lahore but we still need more resources.
- Green waste (gowala colony) and other areas are not clean on daily basis. Smell and dirt everywhere.
- Municipal solid waste being transferred through LWMC and Cantonment board Lahore to Lakhodair landfill site.



BENEFITS OF BIO-GAS PLANT IN LAHORE PAKISTAN

- Lahore will be clean
- Smog free Lahore
- Lahore will be clean as food and vegetable markets waste, slaughter house waste. Poultry waste, food companies and restaurants waste, Industrial waste (sludge) and sewage waste (sludge will be used in bio-gas plant).
- Education
- Employment
- Less Global warming
- Economical progress
- Reduces electricity shortfall

