



Studying the use of Biogas resulted from the degradation of solid waste as fertilizer in Iran

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Biogas is one of the solid waste management methods in human society, particularly villages. Since a large amount of solid wastes as well as food waste, animal and agricultural waste not only produce agricultural fertilizer waste is produced in village, using this method can help also change the organic such as the remaining of crops, human and animal waste and wood into biogas with 60 to 70 percent methane, 25 to 40 percent carbon dioxide and not much Nitrogen, Hydrogen, water vapor and H₂S. Biogas is inflammable and its thermal value is 600 BTU in ft³ comparing with pure methane (nature gas) which its thermal value is 995 BTU in ft³. This system is widely used all over the world especially India and China. Among the energy that may replace the fossil fuels and biogas is considered a source of energy as the solar energy, ground heat, wind and etc are. Biogas is applied in villages /rural areas to use the energy resulting from wastes, which is used in cooking, light, heating and pumping. The advantage of this system is durability and it also has the least damages in the environment. This paper is not only to introduce the types of biogas in the world but also to review the ways of energy production and the fertilizer produced from it adaptable with the environment.

Keywords : solid waste, biogas, energy production, fertilizer produced , environment.