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Prospects For the use of Biomass Energy Sources

Sayfiddinova Hikmatxon Zayliddinovna
Senior lecturer, Namangan Engineering – Construction Institute Uzbekistan, Namangan

Sultonov Sordor Soloxiddin ugli
Teacher, Namangan Engineering – Construction Institute Uzbekistan, Namangan

Abstract: *In this article, the biomass energy calculated from non-traditional sources of energy in the current period of energy shortage and its formation, biomass energy types, technologies of its use, preparation processes, biological waste as a source of energy are overthrown methods.*

Keywords: *biomass, livestock waste, dry products, organic waste, biological waste, unpolluted waste, combined waste.*

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The plant layer of the Earth's sphere is 1800mlrd t. it consists of dry and moist products. In order to obtain biomass energy from dry products, which as a result of processing can be obtained from organic and inorganic products with the use of outgoing waste from them, the burning process is required, in which the fermentation process takes place. But taking biomass from dry products does not give a good effect. The method of obtaining bioenergy from wet products is considered quite effective,in which the required humidity for the fermentation (fermentation) process is high. Among the various organic wastes,the most important products of animal waste are nitrogen,phosphorus and potassium, which in their composition are 0,32-0,64%. From this it can be seen that not only is it possible to extract bioenergy from livestock products, but also to distinguish environmentally friendly agitates.

For the use of biological waste as a source of energy, biological waste is processed in kata reactors (hermetically sealed containers). With the help of biogas, manure (plant residues and animal waste) is processed, combustible gas and high-quality fertilizer humus is obtained. The principle of operation of biogas retrieval devices is a valid expression of natural biological processes. Modern biogas production is based on the processes that occur in nature, that is, the production of methane from the wastes that occur as a result of the digestive activity of animals oshqozonida is based. From biogas technology it is noted that initially in the XVII century BC, various manifestations appeared in the countries of China, India, Assyria and Persia. But, 3,5 thousand years later, in the XVIII century, systematic research on biogas technology began. Currently, biomass energy is on the fourth place in the world as a renewable energy source and supplies 1250 ton conditional fuels per year. As a raw material, organic waste is used in livestock (dung) and food industries. The process of preparation occurs as a result of anaerobic processing and gas is separated, from which consumers can use natural and liquefied gas in place. The composition of the biogas produced is 60-70% methane(CH4), 30-40% uglerod dioxide and a very small amount of serevodorod(H2S). When biogas contains 65% methane, its heat production capacity reaches 23023kJ/m^3.The bioenergy formed as a result of fermentation is used in heating houses and water, in cooking. It is a very

convenient energy to provide rural areas, especially in remote areas. Livestock waste, in turn, is divided into 2 groups:

1. Combined waste - a mixture of pet waste with various additives;

2. Waste without attachments - pet waste with no attachments.

It is also classified according to the composition of livestock waste, namely solid and liquid. In their composition there will be remains of a tree with leaves of cut straw, chor, payraha, apilka, leaves and needles. To clean the waste from the pet, direct water is used, through which the pet is cleaned from the in waste. Usually 80-90% manure is added to 10-20% organic waste, which comes from dairy products and cranberries. Large-horned cattle manure is separated from 1 ton by $25m^3$, poultry by $190m^3$, industrial waste by $130m^3$ biogas.

The main factor in obtaining bimassa energy is heat. As a result of raising the temperature to 15-20 C, biogas are produced, while when the temperature rises, the work productivity increases. For example, taking into account the gas consumption of 26 liters for boiling 1 liter of water, it will be possible to get enough energy from 1 kg of cattle manure to boil water from 7,5-15 liters.

- ✓ 1 liter of 19kg manure of pork;
- ✓ 1kg of bird manure 11,5-15 liters;
- ✓ 1 liter of potatoes 17kg stalk;
- ✓ from the stem of 1kg of legumes can boil 11,5 liters of water.

In place of the conclusion, we can say that today, countries of the world are conducting a number of research on the preservation of nature, rational use of renewable energy resources available in nature. So, is also in Uzbekistan. However, the use of bioenergy in our country has not yet reached the industrial level. The bioengineering devices being created are being used by humans not only for their personal farms. If we were to bring the use of bioenergy to the industrial level, we would have contributed to the energy supply of many remote areas.

Productive use of a large number of livestock products will be spent on the desire for houses and hot water, cooking, heating greenhouses. And through it, the preservation of nature, the rational use of it, the use of less material resources, makes it possible to alleviate the suffering of people.

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