

## Energy Production with Closed Methods

**Authors :** Bujar Ismaili, Bahti Ismajli, Venhar Ismaili, Skender Ramadani

**Abstract :** In Kosovo, the problem with the electricity supply is huge and does not meet the demands of consumers. Older thermal power plants, which are regarded as big environmental polluters, produce most of the energy. Our experiment is based on the production of electricity using the closed method that does not affect environmental pollution by using waste as fuel that is considered to pollute the environment. The experiment was carried out in the village of Godanc, municipality of Shtime - Kosovo. In the experiment, a production line based on the production of electricity and central heating was designed at the same time. The results are the benefits of electricity as well as the release of temperature for heating with minimal expenses and with the release of 0% gases into the atmosphere. During this experiment, coal, plastic, waste from wood processing, and agricultural wastes were used as raw materials. The method utilized in the experiment allows for the release of gas through pipes and filters during the top-to-bottom combustion of the raw material in the boiler, followed by the method of gas filtration from waste wood processing (sawdust). During this process, the final product is obtained - gas, which passes through the carburetor, which enables the gas combustion process and puts into operation the internal combustion machine and the generator and produces electricity that does not release gases into the atmosphere. The obtained results show that the system provides energy stability without environmental pollution from toxic substances and waste, as well as with low production costs. From the final results, it follows that: in the case of using coal fuel, we have benefited from more electricity and higher temperature release, followed by plastic waste, which also gave good results. The results obtained during these experiments prove that the current problems of lack of electricity and heating can be met at a lower cost and have a clean environment and waste management.

**Keywords :** energy, heating, atmosphere, waste, gasification

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