THE USE OF BIOMASS AS A SOURCE OF GREEN ENERGY

Mintaş Olimpia, I. Mintaş

University of Oradea, Faculty of Environmental Protection
Oradea, No.26 Gen.Magheru Blvd.
buzasiu@yahoo.com

Keywords: pollution, impact, durable energy, swine, environment, zooculture

SUMMARY

Under the circumstances of an unprecedented economical development, a reasonable question may be put: can this development be supported without prejudicing the environment and the human health? The most convenient recyclable resources (depending on the usage costs and on the volume of resources) used for producing electric energy are the micro-hydroelectric power station, the aeolian turbines and power stations with co-generation which use biomass, and, for producing thermal energy, the biomass and the solar energy.

The by-products of animal and vegetal origin, as well as the debris originated from farms, constitute organical substrata within the process of anaerobic fermentation which has as results large quantities of biogas.

The implementation of an investment – installation for obtaining electrical energy from the biomass –has many benefits, among which we mention:A) in the field of energy producing: a source of energy will be produced from recyclable resources; there will be an active participant on the market of energy obtained from recyclable resources, contributing to the viability of this market; non-recyclable energy resources will be saved. B) in the field of environmental protection: environmental pollution with extremely harmful and difficult to remove debris of animal origin will be avoided; the emissions of gases with greenhouse effect will be avoided; the consumption of non-recyclable resources will be reduced. C) in the field of economy: the swine farms which provide the raw material for producing of biogas will increase their competitiveness by lowering the costs for debris refinement. These farms are on a highly competitive market; a viable, non-pollutant economical industry is expected to appear in the area. D) in the social field: new jobs will be brought into existence for the inhabitants of Cefa- a rural commune in full development.

BIBLIOGRAPHY