



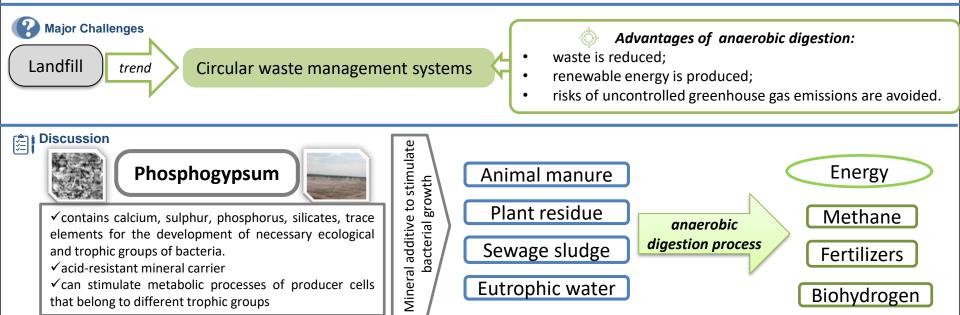
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ENVIRONMENTALLY SAFE UTILISATION OF WASTE IN THE ANAEROBIC CONVERSION PROCESS



Conclusions

Almost all types of organic waste can be used as an initial substrate for anaerobic digestion. Phosphogypsum is an additional source of macro- and microelements, and it is important to find new ways of recycling chemical waste such as phosphogypsum. The addition of trace metals increases the efficiency of the anaerobic process by enhancing substrate digestion, biogas production, and low concentrations of intermediate fermentation products, i.e. volatile fatty acids. The use of a support medium for the immobilization of microorganisms is widely known to provide a surface for microbial growth and a shelter that protects the microorganisms from inhibitory compounds. It should be noted that phosphogypsum additive can be used in different bioconversion processes (anaerobic and aerobic) for the growth stimulation of different bacteria species.

> "EcoMining: Development of Integrated PhD Program for Sustainable Mining & Environmental Activities"