

"Technology and Research Aspects of Biogas Production from Agricultural Wastes and Energy Crops in the EU"

Wastes come in many forms and as a consequence there exists many different treatment methods. However, many wastes provide opportunities for recovery of useful materials or the recovery of energy. Wet biodegradable wastes must be treated to minimise harmful methane emissions and the opportunity exists to capture the methane for use as a renewable fuel. In the EU recovery of methane, or biogas as it is usually called in the impure state, is achieved by anaerobic digestion (AD). The wastes feeding the AD processes are most commonly from water treatment (sewage) plants and agricultural slurries (animal dung) as well as some residues from the food processing industry. The latter are particularly useful in terms of accelerating the rate of biogas production in the digester. The presentation summarises AD in the EU and stresses the importance of co-digestants. It further summarises a number of EU projects, on-going and completed, dealing with different aspects of biogas production and cleaning. Finally, the most recent addition to biogas production on a large scale, energy crops, is summarised. It is shown that the EU has a relatively mature status regarding technology and the technology is increasingly being adopted by farmers and waste management companies as a means of treating the waste and gaining income from the sales of electricity, heat and vehicle fuel.