

BIOGAS : Renewable energy with many opportunities - Focus on waste and biomethane

Muche, H.

Strategic Infrastructure Business Consultancy Services GmbH, Hamburg, Germany

The properties of biogas and the substrates from which biogas is produced are described. The requirements for the properties of the substrates are presented. Basics of the technology of biogas plants. Properties of waste from which biogas can be produced. Estimation of the recoverable quantities of gas that can be produced from waste to illustrate the potentials. Waste separation to separate the disruptive materials as a prerequisite for gas production. Use of the biogas as fuel for gas engines, in boiler plants and for the production of biomethane. Comparison of LPG and CBG, possible uses of CBG. Processes for the separation of carbon dioxide for the production of CBG. Future ways of using biogas. Parallel production of biohydrogen and biogas. Examples of plants for the production of biogas and biomethane.