

Biogas Plant IM BRAHM



Location	Essen, Germany
Construction Period:	2005, enlargement 2007/2011
Input substrat:	pig manure, kitchen waste, horse dung
Fermenter:	Concrete tank 2 x 1,205 m ³
CHP	Gas engine 3 x 190 kW
Special Features:	Two-stage process, mesophilic process, gas holder both on top of digester and secondary digester, digester mixed with side-mounted mixers
Cost:	about € 1,000,000 without enlargement

Im Brahm Recycling GmbH collects kitchen waste from restaurants and canteens. The kitchen waste is pretreated with a shredder with subsequent removal of contraries and pasteurization before entering the biogas plant. The biogas plant is a BGB company founded by the agricultural holdings of Annette and Einhart im Brahm. Both agricultural holdings have long-time worked in pig fattening with kitchen waste. As this was forbidden by EU-law in 2006 they looked for an alternative use of kitchen waste and decided to produce regenerative energy in a biogas plant. Construction work for a 190 kW-plant started in 2005. The biogas plant was connected to the existing pretreatment plant for kitchen waste. The biogas plant is in operation since autumn 2005. Already in 2007 an additional CHP was added to enlarge the plant. In 2011 an additional digester and a third engine were added to increase the treatable amount of kitchen waste. Heat produced in cogeneration is used not only internally for pasteurization and digester heating but also in the surrounding buildings as residential building, office buildings, stables and storehouse. Also the nearby castle with a hotel is connected by a heating pipe.