PROTECTING MAN AND ENVIRONMENT

Technology Offer

Polyolefin-Recycling and energy generation from waste

(08 DE 0957 0IDG)

Abstract

A company cooperation from Saxony developed a solution for the complete utilisation of domestic waste and industrial waste with autarkic electrical energy generation. The organic part of the domestic waste is translated into humus, polyolefin plastics are transformed back into oil, PET bottles into high valued PET granulate. The companies are looking for technical cooperation.

Description

A company cooperation from Saxony developed a solution for the complete utilisation of domestic waste and industrial waste with autarkic electrical energy generation. The organic part of the domestic waste is translated into humus, polyolefin plastics are transformed back into oil, PET bottles into high valued PET granulate. The rest of the high-heating-value fractions are used for the generation of electrical energy. This leads to an autarkic operating method of all technological processes with constant power supply. The over production of energy could be sold to the local network operator.

Domestic waste and industrial waste is hackled and selected with common technology. The organic parts are decomposed with a Rotte (or another mechanical-biological waste treatment plant) and stabilised.
There is nearly no bad small.
The rest of the high-heating-value fractions become further selected to transform:
-Polyolefin-plastics into crude oil
-PET bottles into PET granulates
-Residues into electrical energy

Innovations and advantages of the offer

Compared with common technologies this concept achieves a most efficient resource recycling, which warrants that the high energy input is secured with its own energy generation.
Constantly rising prices for electrical energy, crude oil and PET granulates needs new technologies. Depending on the prices for domestic and industrial waste the concept amortises within a few years (< 5 years)

Current and Potential Domain of Application

The technology is developed for waste amount up to 100 000 Mg / a . The involvement of sewage sludge is possible.

For further information (including IPR status) please contact:
Susanna Chericoni
Phone: 39 050 931620
Fax: 39 050 931640
Email: s.chericoni@cpr.it