Pressinformation

BINE Informationsdienst

Bonn, 12 December 2014

Generating biogas in composting plants

Pre-pressing organic waste and feeding liquid to bacteria

Composting plants can do more than just convert the content of organic waste containers into nutrient-rich soil. If the facilities are supplemented with an additional biogas stage, energy can also be generated there. To achieve this, the organic waste is pre-pressed and the liquid generated is digested in digesters. The BINE-Projektinfo brochure “Organic waste: combining compost and biogas” (17/2014) presents this process for generating biogas along with the initial practical experiences. The developers have paid particular attention to achieving an economical process that is not susceptible to faults.

The new method produces not just compost but also biogas. The organic liquid separated from the organic waste during pressing provides the nutrient that is fed to bacteria in the newly developed bio-film digesters. The biogas generated in the process can be converted into electricity in a CHP plant or fed into the natural gas grid. The method has proved its robustness in practical testing. The squeezed organic waste is then passed through the usual composting processes and at the end produces compost of an almost unchanged quality. Particularly because of the mechanical ventilation systems, composting plants were previously only energy consumers.

The addition of a biogas stage enables the capacity of existing composting plants to be increased by 10 to 15% with the same energy requirement and without expanding. The method was developed by the Sutco Recyclingtechnik company in collaboration with the University of Duisburg-Essen and the Entsorgungs-Gesellschaft Westmünsterland (EGW) waste disposal company. The practical tests took place at its composting plant in Gescher, Germany.

The BINE Projektinfo brochure, which can be obtained free of charge from the BINE Information Service at FIZ Karlsruhe, is available online at www.bine.info or by calling +49 (0)228 92379-0. The brochure cover and additional image material can be downloaded from this web portal in the press section.

Contact
Uwe Milles
presse@bine.info

BINE information service
Kaiserstraße 185-197
53113 Bonn
www.bine.info

BINE is an information service by FIZ Karlsruhe
www.fiz-karlsruhe.de and supported by Federal Ministry of Economic Affairs and Energy
on the basis of a decision
by the German Bundestag