

2019-02-13 | Publikation | International | Konversionstechnologien

Gasification of waste for energy carriers – a review

This report of IEA Bioenergy Task 33 presents an overview of the use of waste gasification technologies, both in terms of regulatory aspects and technical applications. The quantities of wastes that could be treated by thermal methods is huge and globally amounts to many hundreds of millions of tonnes annually, some of which is already processed in incinerators but still a very considerable fraction is disposed of in landfills.

The use of waste gasification technologies has the potential to increase the efficiency to power compared to waste incinerators. In addition, waste gasification can also be used not only for energy recovery but also to produce fuels or chemicals, i.e. material recovery. Both these options however require that the product gas from the gasifier is subjected to a more or less extensive cleaning in several stages before it is combusted or used for synthesis. Gasification and gas cleaning technology is still in development and entails both technical and non-technical risks. A number of first-of-a-kind installations using different power cycles and fuel synthesis pathways are in early operation, commissioning, construction or planning stage.

Source/ download report: IEA Bioenergy

<https://www.ieabioenergy.com/publications/gasification-of-waste-for-energy-carriers-a-review/>