

Reforming and Gasification – Biomass

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Abstract

Gasification is an efficient method to convert both wet and dry biomass into a gaseous product with a usable heating value. Recently, the technology for the gasification of dry biomass has approached commercialization for some applications. In addition, a variety of processes for different products are currently tested in pilot plants. In future, these processes could provide a significant contribution for the sustainable production of biomass-derived energy carriers which could be used for mobile and stationary applications (e.g., fuel cells). In contrast to conventional gasification, hydrothermal processes can efficiently convert biomass with its natural water content. However, hydrothermal gasification still requires further research and development before large-scale pilot plants can be built.

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