The bioliq®-BtL-process line: from basic research to pilot plant operation

Synthetic compounds from biomass (also referred to as BTL, biomass to liquids) may contribute to biofuel and biochemical production to a considerable extent. To overcome the logistical hurdles connected with the industrial use of large quantities of biomass, the de-central-centralized Bioliq® concept has been developed. It is based on a regional pretreatment of biomass for energy densification by fast pyrolysis. The intermediate referred to as biosyncrude allows for economic long-range transportation. Collected from a number of those plants, the biosyncrude is converted into synthesis gas, which is cleaned, conditioned, and further converted to fuels or chemicals in an industrial plant complex of reasonable size. The Bioliq® process chain will be surveyed with a focus on the R&D pathway from basic research to pilot plant operation and a glimpse of its economics and feasibility.