BTG Bioliquids Refinery
Pyrolysis based biorefinery
Pyrolysis based refinery of biomass

Pyrolysis oil and technologies

Pyrolysis is the process of heating of biomass without oxygen. Pyrolysis technology is the most traditional and single step is heating oil or biomass resulting in a dense gasole for their direct or indirect. Cooling the dense gasode results in oil called pyrolysis oil. Biomass is a natural product that contains carbon. Examples are wood, straw and other organic residues or by-products of agriculture.

Bioeconomy based on pyrolysis of biomass is an important step in the transition towards a sustainable economy. The BioLiquids Refinery makes maximum use of the existing infrastructure of our agricultural and the petrochemical industry, facilitating a smooth and effective greening of our economy.

Advantages of BioLiquids Refinery

- Downstream production of the pyrolysis oil in regions where biomass resources are most available
- Cost-effective transport of liquid pyrolysis oil in existing large-scale processing units
- Linking agriculture and petrochemical industry
- Minerals and biofuels to the country of origin

Biobased Economy

- The Dutch government has formulated a target of replacing 30% of feed raw materials by biomass in the year 2030
- The chemical industry has set a target of 12% green in 20 years
- This includes a transition process that will be revolutionary and that will be the next decade
- The goals are less emissions of greenhouse gases and less dependency on fossil oil, coal and natural gas
BTG Biomass Technology Group bv foresees a great future in ‘greening’ the (petro)chemical industry and energy production. Pyrolysis is a technology suitable for converting biomass into an uniform and clean oil. The technology has been further developed and scaled-up by BTG since 1993. BTG has a strong worldwide acknowledged reputation in this field. BTG has demonstrated a pyrolysis oil production facility on a semi-commercial scale in Malaysia (8 million liter/yr) based on agro residues. Through its daughter company BTG BioLiquids (BTG-BTL), a new facility is being developed and implemented with a capacity of 20 million liters of renewable oil annually in Hengelo, The Netherlands. This facility will be a first step in the transition process towards a biobased economy, in which the BioLiquids Refinery concept will play an important role.