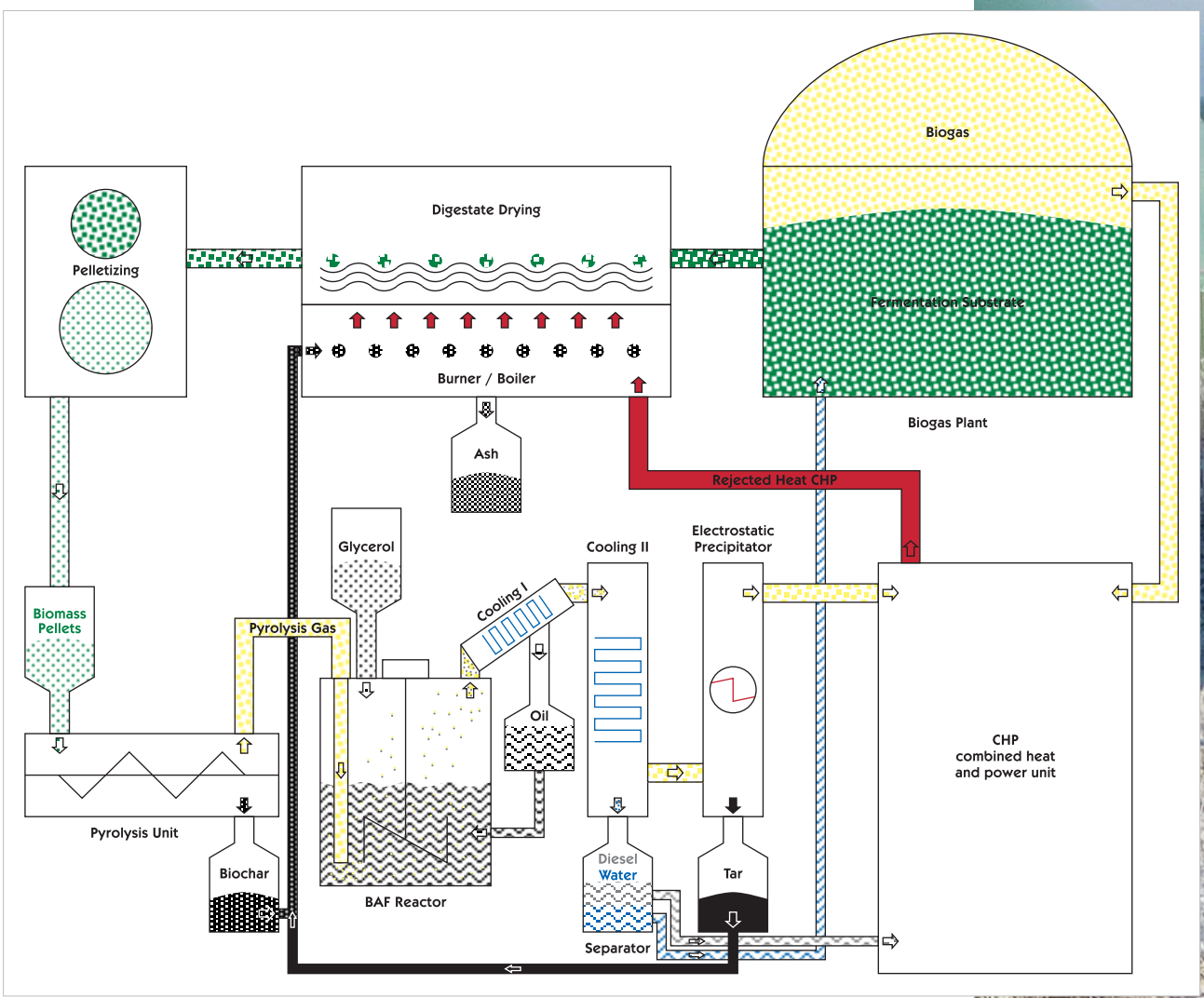
Biogas and BAF

The **BAF technology** – a two-stage process generating an engine-suited fuel from biomass in combination with long-chain oils for use in cogeneration units – is ideal for use in combination with a biogas plant.
The dryed and pelletized digestate from the biogas plant is separated into biochar and pyrolysis gas by means of a pyrolysis unit.
Following the the resulting pyrolysis gas is fed into the BAF reactor where it reacts with hot glycerol. The resulting product gas is condensed into an oil component and a diesel-water component by two stages of cooling. Finally the remaining gas is cleaned in an electrostatic precipitator and directly converted into electrical energy in a combined heat and power unit, where also the biogas from the plant is set.
The biochar generated by pyrolysis together with the precipitated tar and the waste heat from the CHP is harnessed to dry the digestate.
The separated diesel as the gas also can be used in the CHP.
The separated water is supplied to the biogas plant.
Laboratory tests at the Harper Adams University College in the UK showed a higher rate of yield up to 25% methane gas in the fermenter by adding the process water.



WSE limited
Germany branch
Rudolf-Schulten-Strasse 8
D-52428 Juelich
telephone: +49 2461 936080
fax: +49 2461 9360810
e-mail: info@wse.de
internet: www.wse.de

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