

Introduction

By amendment of the renewable-energy-law, the German Parliament "Bundestag" has decided to increase the share of renewable energy by the year 2020 up to 20 percent of the whole German electricity supply.

Crop biomass can make a huge contribution to the production of biogas. Most suitable are special biogas crops. These biomasses can be used for mono-fermentation as well as for co-fermentation with manure or other organic materials.

Biogas Crops



Among maize (picture) also rye, fodder beet and grass are used as biogas crops.

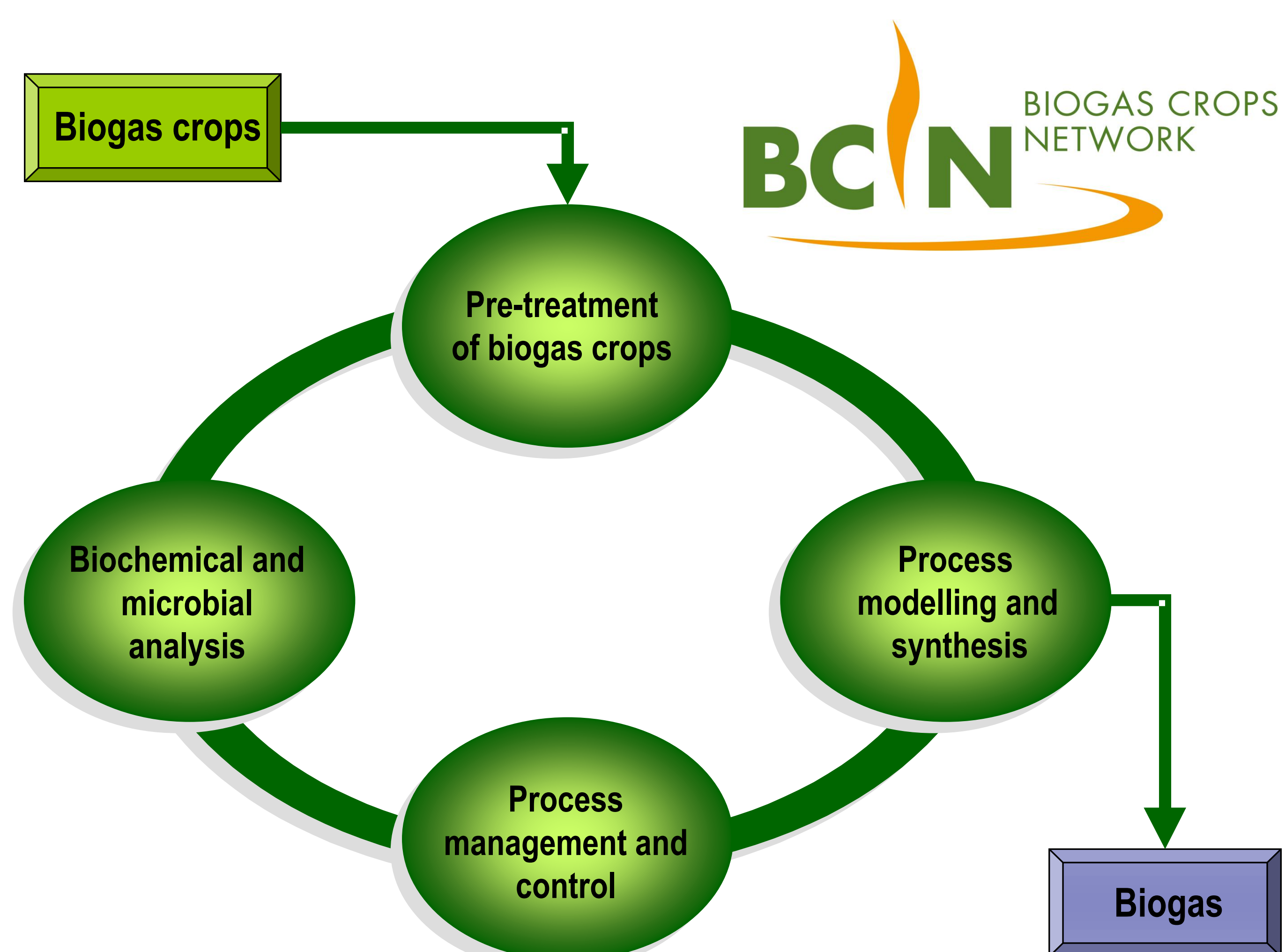
Tasks and Aims

The project aims to identify and develop scientific basics for biogas production from crop materials using mono-fermentation. This shall be done by a well directed systematic analysis of the microbiological conversion of the material under consideration of the influence of pre-treatment and storage of the crop substrates, the formation of intermediates as well as the process control. The tests will be done by using different types of biogas crops, which differ considerably in structure and material composition and which have a high relevance for a practical usage in agricultural biogas plants.

The network of participating institutes wants to develop a systematic basic research along the whole value-added chain: crop (energy accumulator) > energy conversion process > energy source

Organisation

The network "Biogas Crops Network" is organised in four working groups relating to the four main research areas respectively:



Network partner

Leibniz-Institut für Agrartechnik Bornim e. V. **ATB**

Brandenburgische Technische Universität Cottbus. Fakultät Umweltwissenschaften und Verfahrenstechnik **BTU**

Bundesforschungsanstalt für Landwirtschaft Braunschweig, Institut für Technologie und Biosystemtechnik **FAL**

Hochschule für Angewandte Wissenschaften Hamburg, Forschungsschwerpunkt Lifetec Process Engineering/ Angewandte Mikrobiologie **HAWH**

Humboldt-Universität zu Berlin, Landwirtschaftlich-Gärtnerische Fakultät, FG Agrartechnik **HU**

Institut für Agrar- und Stadtökologische Projekte an der Humboldt-Universität zu Berlin **IASP**

Bayerische Landesanstalt für Landwirtschaft, Institut für Landtechnik, Bauwesen und Umwelttechnik **LfL**

Technische Universität München, Lehrstuhl für Siedlungswasserwirtschaft **TUM**

Universität Heidelberg, Lehrstuhl Simulation in Technology **UH-SiT**

Universität Hohenheim, Landesanstalt für Landwirtschaftliches Maschinen- und Bauwesen **UH**

Contact (Network-Coordination)

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