# BIOCAS



The development of prosperous rural areas in the North Sea Region by realizing Biomass Cascading Alliances (BCA) covering all stakeholders involved in the value chain of biomass.

# **General information**

- Project period: 01 July 2017 - 30 June 2021
- 18 partners from Belgium, Germany, Denmark and the Netherlands
- Total budget: € 4.969.239
  ERDF contribution: € 2.484.620

For more information about the project, please contact us:

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# **Background**

The North Sea Region (NSR) is one of the most prosperous parts of the European Union. Economic growth is predominantly found in the urban areas. Instead, rural areas experience problems like population decline and negative economic growth.

# **Objectives**

The objective of the BIOCAS project is to ignite the development of rural areas into smart specialized regions for the integrated and local valorization of biomass, based on biomass cascading principles. The 18 BIOCAS partners from Denmark, Germany, Belgium and the Netherlands firmly believe that this will generate economic, societal, ecological benefits and prosperity.

#### **Work Packages**

The main focus of BIOCAS is to realize concrete Biomass Cascading Alliances (BCA's) for a more sustainable conversion of biomass. A BCA covers all stakeholders which are involved in the value chain of biomass.

Development of new bio-cascading technologies, services and products will be the starting point of a BCA. Alliances will be formed by using stakeholder analysis, business modelling, life cycle analysis, etc. The resulting BCA's will realize real life trials which will be used to convince stakeholders to scale up. This will ignite the development of a strong regional circular economy in the rural areas of the NSR.



Biorefining of forages to green protein and fibrous pulp, University of Aarhus.



Cascading means that you always try to get the components with the highest added value from your biomass first. High-quality components can be used for complex chemical processes - such as making medicines or chemicals. Parts of biomass that can no longer be used for materials or chemistry can always be used later in the process for generating energy.

# The initiatives of BIOCAS share four circular bio-economy principles:

- 1. An integral approach, including the whole chain of production, collection, treatment/conversion and application.
- 2. A truly circular perspective that includes the value of healthy soil, nutrition value of food products and biodiversity.
- 3. A direct linkage between the optimal valorization of biomass and prosperity of regional (rural) communities (closing the cycle as locally as possible).
- 4. Participation of partners along the entire biomass chain including 'specialized' SMEs for the valorization of biomass.

# **Project partners**

# Denmark (7)

- Agrovi
- University of Aarhus
- Business Lolland-Falster
- CELF
- Guldborgsund Municipality
- University of Southern Denmark
- World Perfect

## Germany (3)

- Oldenburg University
- Landkreis Heidekreis
- 3N Centre of Experts

#### The Netherlands (6)

- Province of Fryslân
- Hanze University of Applied Sciences
- Limm Recycling

- Rinagro
- NHL University of Applied Sciences
- Van Hall Larenstein University of Applied Sciences

#### Belgium (2)

- University of Leuven
- Ghent University





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