



Research Projekt „Digestate Fibers“

„Research project on using fibres from nitrogen-reduced digestate from biogas plants to substitute material in particleboard- and MDF-production“, (2012 - 2014), sponsored by DBU

Partners:

BENAS Biogasanlage GmbH, Vorwerk
Nova-Institut GmbH, Hürth
GNS mbH, Halle/Saale
Glunz AG, Meppen

Objektives:

- Co-treatment of digestate fibers to eliminate ammonia odor.
- Check of digestate fibers as wood substitute in particle board, MDF and HDF boards.

Results:



- Up to 30 % biogas fibers in particle board, MDF and HDF boards possible.
- Standardized labeling and emission values.

- Large scale production of floor plates in the plant „Laminatpark Eiweiler“ with approx. 3 % cleaned biogas fibers (10 t DM).
- Production of 19,000 m² marked-based floor plates.

Challenges:

- Technical optimization of fiber production in a FaserPlus-Plant System GNS.
- Technical long-term testing and optimization in the use of wood substitute materials.

Prospects:

- Through the co-treatment of digestate fibers new use cascades are possible.
- Development of new value-added potential for biogas plants.
- Improvement of raw material and cost situation for the wood product industry.