

Anaerobic Digestion Technologies

SAHYOG Twinning

Through facilitating and coordinating project twinning, SAHYOG brings together project coordinators and other lead partners from past and on-going projects as well as international networks in order to consolidate R&D results, exploit synergies and thus build up a critical mass for future EU-India research collaboration in the area of biomass and bio-waste.

Background

Anaerobic digestion (AD) is a biochemical process in which various types of anaerobic microorganisms (bacteria) decompose complex organic matter (biomass) into smaller compounds, in the absence of oxygen. In biogas plants organic feedstock (e.g. agricultural waste (animal and plant waste), dedicated crops, urban waste, sewage sludge) is anaerobically digested in order to decompose it into biogas and digestate. The latter is a valuable fertiliser whereas biogas is often used in stationary CHP plants or may be up-graded to bio-methane for injection into the natural gas grid or application as transport fuel.

Research Themes

The following research themes in the field of anaerobic digestion will be addressed under SAHYOG twinning:

- Optimisation of feedstock collection and logistics
- Development of cost and environmentally efficient pre-treatment processes
- Improvement of microbiological processes for a variety of feedstock types
- Process integration (e.g. optimisation of sizes and layouts of digesters)
- Development of suitable purification and upgrading technologies for biomethane
- Bio-hydrogen production by acidogenic fermentation and microbial electrolysis

SAHYOG Twinning – How to get involved?

With respect to EU-India twinning, the following activities and procedures are foreseen within SAHYOG:

- Get in contact with SAHYOG partners responsible for twinning (Robert Bakker, Rainer Janssen, Dominik Rutz)
- Sign Letter of Interest on India-EU SAHYOG twinning
- Define your areas of interest for research cooperation
- Cooperation contacts from India/Europe are identified by SAHYOG
- Assistance for twinning activities is provided by SAHYOG
- Participation in SAHYOG twinning workshop is facilitated

India-EU SAHYOG Twinning Activities



Strengthening Networking on Biomass Research and Bio-waste Conversion - Biotechnology for Europe India Integration

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