## Biomass to Chemicalsthe biorefinery approach

#### **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

Around the world small but discernable steps are being taken to move today's fossil based economy to a more sustainable economy based on greater use of renewable resources. Biobased products (chemicals, materials) can be produced in single product processes; however the integrated biorefinery processes producing both biobased products and energy carriers (biofuels, power, heat) is probably a more efficient approach in sustainable valorisation of biomass. Biorefining can also be integrated with food or animal feed production. A key factor in the realisation of a successful bio-based economy will be the development of biorefinery systems that are well integrated with existing infrastructure. Through biorefinery development, highly efficient and cost-effective processing of biological raw materials to a range of bio-based products can be achieved.

#### **Research Themes**

Based on a classification proposed by IEA Bioenergy Task 42, the following research themes in the field of integrated biorefineries will be addressed under SAHYOG twinning:

- Syngas-derived chemicals
- Biogas
- C6 and C6/C5 derived chemicals
- Plant-based Oil Platform
- Algae Oil Platform
- Green Biorefinery
- Lignin-based chemicals
- Pyrolysis Oil Platform

#### **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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