BioChain – Project partners workshops

Welcome to the workshop for the project partners in the BioChain project.

Background

The partners have agreed on to organise one workshop each year at which we will work on the decision support model (consisting of two to three sub-models) that shall be the outcome the Biochain project. This workshop is the first one of three workshops and the outcome must be a concept decision support model in excel. The frame of this work is as follows:

- Biogas production from organic household waste co-digested with animal slurry may not provide sufficient energy during peak consumption periods; therefore, beet pulp will be added to the digester to increase production in peak consumption periods.
- Feed to the reactor is animal manure/organichousehold waste and beet pulp.
- Consider an annual wheel for harvest and storage of beet pulp and how this biomass can be used in an annual wheel to increase biogas production when need is high and vice versa, i.e. used to make production fulfil demand.
- Variation in consumption of power and heat during the year
- Economy of systems and value chains
- Decision support for assessing need for regulation/incentives

Result of the work must be a report in form of an article (With annexes) written to the Journal Energies. *Energies (ISSN 1996-1073) is an open access journal of related scientific research, technology development and policy and management studies. It publishes reviews, regular research papers, and communications. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. The full experimental details must be provided so that the results can be reproduced.*

Objective of the workshop

- Inform about planned project activities
- Align end user expectation with objectives of research activities.
- Facilitate collaboration between PhD's and post doc's involved through a joint activity.
- Agree on a program for the joint model development activity. The participation in this workshop and course activity will also give the PhD fellows 2 ECT points (Enrollment at DTU-E).

Venue

Danhostel Lyngby-Taarnbæk, Raadvad 1, 2800 LYNGBY - DK.

Homepage : www.lyngbyhostel.dk

Phone : 4580 3074 - Fax 4580 3032.

Dates

Monday the 27th January 2014 - 11:30 till Wednesday the 29th of January 2014 - 13:00.

Program

Monday 27th of January

11:30 – 12:00	**Venue**
12:00 – 12:30	Brief intro to the workshop and information about participants
12:30 – 13:30	Lunch
13:30 – 14:30	Industrial partners present demands to outcome of the project and how they can support the project partners.
13:30-13:45	Michael Støckler on behalf of Alan Lunde Chefkonsulent Vestforsyning A/S, Maarbjerg Bioenergy
13:45-14:00	Annemarie Gotfredsen, Fredericia Spildevand A/S
14:00-14:15	Jeppe Bjerg, Senior Analytiker, Energinet DK (E-DK)
14:15-14:30	Michael Støckler, (KCA) Knowledge Centre for Agriculture
14:30-15:00	**Pause**
15:00-15:15	Lise Skovsgaard Nielsen, (DTU-M) Management Engineering

15:15-15:30	Ida Græsted Jensen, (DTU-M) Management Engineering
15:30-15:45	Ali Heidarzadeh, University of Southern Denmark
15:45-16:00	Alessio Boldrin, (DTU-E), Department of Environmental Engineering
16:15-16:30	**Pause**
16:30-16:45	Temesgen M. Fitamo, (DTU-E),Department of Environmental Engineering
16:45-17:00	Khagendra Baral, Aarhus University
17:00-17:15	Quan Van Nguyen, University of Copenhagen
17:15-17:30	General discussion
17:30–18:00	Walk in the forest in the dark-☺
18:00–19:00	Dinner

Tuesday 28th of January

Project planning, lectures, group work etc.
Group work with the aim to develop and present a conceptual model using Maabjerg biogas plant as an example. It is assumed the plant use animal manure and beet pulp to produce biogas for power and heat.

8:30-9:15	Sven G. Sommer: Lecture about writing joint articles & Introduction to Decision Support System Concepts
9:15-9:30	**Pause**.
9:30-9:45	Sander Bruun presents - Digestate management and end use.
9:45-10:00	Jin Mi Triolo - Biogas production using animal slurry and beet pulp.
10:00-10:15	DTU-M - Conceptual understanding of the plant level model
10:15-10:30	Alan Lunde Chefkonsulent Vestforsyning presents the biogas plant.
10:30-10:45	Groups (I: WP1+WP5, II: WP3+WP4) discuss the frame of the concept model and provide questions to the lecturers from this morning's session.
10:45-11:00	**Pause**
11:00-11:30	Questions to the lecturers from the morning sessions and supervisors.
11:30-12:00	Mixed groups (Mixed means groups composed with students from different research areas) work on vision and main objective of the concept model
12:00-13:00	**Lunch**
13:00-14:00	Presentation of vision and objective, agree on vision and objective of work.
14:00-15:00	New mixed group - work on describing the results or deliveries to be the outcome of the study. Present these and agree on these in plenum
15:00-16:30	Groups WP1+WP5, group WP3 and group WP4 work out plans for activities to be carried out in order to deliver the results agreed on.
19:00-21:00	Partners from DTU-M present their request for data. And Triolo presents which information she can contribute with from the work already carried out. Discussion about how to contribute with data

Wednesday 29th of January

8:30–9:30	Groups WP1+WP5, group WP3 and group WP4 present the outcome of their work
9:30–10:30	Groups WP1+WP5, group WP3 and group WP4 work on distributing work load agree on strategies and model concepts to be filled out etc. Especially how models shall interact is discussed in plenum during the morning sessions. Supervisors will support this work.
10:30–12:00	Participants split into groups deciding on research actitivities in smaller groups

A manuscript is delivered to the project coordinator in June 2014