

IEA Bioenergy ExCo80 workshop

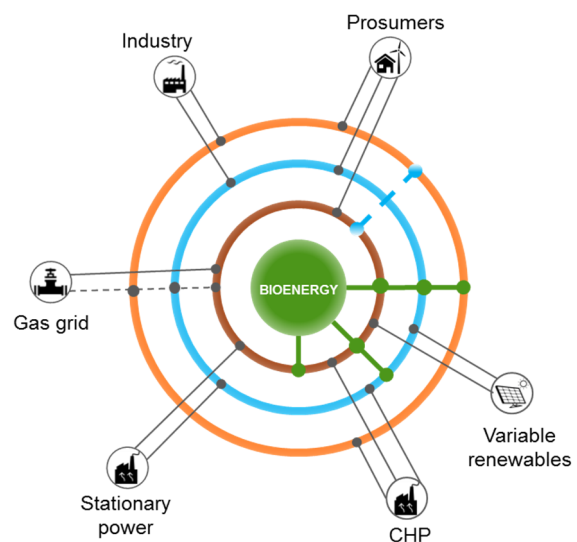
Thursday 19 October 2017, Baden – Switzerland

Bioenergy grid integration

Workshop organized by IEA Bioenergy, in collaboration with the Swiss Federal Office of Energy

Introduction

The use of grids is an efficient means of distributing various types of energy, including electricity, heat and gas. Connecting bioenergy to (existing) grid infrastructure facilitates short and long term deployment of bioenergy, and provides important opportunities for greening such grids. On the other side it creates options for convergence and integration, which can help balancing grids and create synergies with other renewable energy forms.¹



This workshop will demonstrate a number of cases and strategies of bioenergy grid integration and provides an opportunity to further discuss the role bioenergy can play in greening energy grids.

¹ Figure from the IEA Bioenergy study 'Bioenergy's role in balancing the electricity grid and providing storage options – an EU perspective'

Programme

13.45 Registration

14.00 **Welcome & Introduction** (5 minutes each)

Sandra Hermle, Swiss Federal Office of Energy

Kees Kwant, Chair IEA Bioenergy

14.10 **Session 1 - Connecting bioenergy systems to heat grids**

Facilitator: Jaap Koppejan, Leader Task 32 IEA Bioenergy

- Heat grid - District heating with biomass in Switzerland and internationally – Thomas Nussbaumer, Verenum, Switzerland (20 minutes)
- How to build and integrate a district heating network – success story with hurdles - Urs Rhyner, Agro Energie Schwyz AG, Switzerland (20 minutes)
- Contribution from IEA DHC/CHP – Robin Wiltshire, Chairman (20 minutes)
- Convergence of the grid – taking all different grids into account: “Hybridwerk Aamatt” – At the interface of the electricity, gas and district heating grid – Andrew Lochbrunner, Regio Energie Solothurn, Switzerland (20 minutes)

15.40 Tea/Coffee

16.10 **Session 2: Convergence of gas, heat and power grids, with a special focus on biogas**

Facilitator: Urs Baier, Zurich University of Applied Sciences

- The strategic integration of biomethane in the grid – the view of a Swiss energy provider and network operator– Andreas Kunz, Energie 360°, Switzerland (20 minutes)
- System modelling for assessing the potential of decentralized biomass CHP plants – Gil Georges, Aerothermochemistry and Combustion Systems Laboratory, ETH Zürich, Switzerland (20 minutes)
- Power grid - Virtual Power Plant for demand responsive energy production from biogas plants – Martin Schröcker, Fleco Power AG, Switzerland (20 minutes)

17.15 **Panel discussion on how bioenergy can play a role in the greening of existing grid systems** (35 minutes)

Moderator: Jaap Koppejan & Urs Baier

17.50 **Summary and conclusions**

18.00 Closure of the workshop and start of the Apéro riche

Practical information

Date:

Thursday 19 October 2017,
13.45-18.00

Meeting location:

The Trafo Hallen
Brown Boveri Platz 1
5400 Baden - Switzerland



Recommended hotels:

The Trafo Hotel

<http://trafohotel.ch/de/home>

or visit the website <https://www.baden.ch/en/recreational-activities/city-tours/public-city-tours.html/133> for suitable alternatives.

Participation: invitation only

Participation is to be confirmed to Linda Thomann, Swiss Federal Office of Energy (email: linda.thomann@bfe.admin.ch) before Sunday 01 October 2017.

More information:

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