

SUMMARY OF THE 19TH IETS EXECUTIVE COMMITTEE MEETING NOV 25-26 2014, LUCERNE, SWITZERLAND

The meeting was kindly hosted by observer country Switzerland and Lucerne University of Applied Sciences & Arts (HSLU).

The following persons took part in the meeting and the preceding workshop:

- Thore Berntsson (Chair, Chalmers University of Technology, Sweden)
- Jennica Broman (Swedish Energy Agency, Sweden)
- Claus Börner (Forschungszentrum Jülich GmbH, Germany)
- Maurits Clement (vice Chair, RVO Netherlands Enterprise Agency, the Netherlands)
- Per-Åke Franck (IETS Secretariat, observer to Annex XIII, CIT Industriell Energi, Sweden)
- Rainer Jacobs (Annex XIII Participant, Germany – day 1)
- Jens Mikkelsen (Observer, Weel & Sandvig, Denmark)
- Clemente Pedro Nunes (vice Chair, Technical University of Lisbon, Portugal)
- Michael Spirig (Observer, Fomenta, Switzerland)
- Emmi Voogand (IETS Secretariat, CIT Industriell Energi, Sweden)
- Beat Wellig (Observer, HSLU, Switzerland)

Unfortunately, IETS member countries Korea, Belgium and the U.S could not participate. There were however additional workshop participants: John Bagterp Jörgensen (DTU, Denmark), Erich Bötsch (SFOE, Switzerland), Daniel Favrat (EPFL, Switzerland), Pierre Krummenacher (Planair, Switzerland) and Donald Olsen (HSLU, Switzerland). Lawrence Hooey (Annex XIV Manager, Swerea Mefos, Sweden), participated in one part of the meeting (day 2) by phone connection. The workshop is described below.

SUMMARY OF MEETING

The IETS ExCo is working on a **Matrix of Research Activities**, pinpointing areas of interest for enhanced activities by the IETS. At this meeting it was concluded that materials and separation technologies are to be targeted in a next step, along with the area of heat exchangers. In all three areas, the main aim is not a full and objective coverage, but more the knowledge transfer in itself. To identify groups working in these areas and in different ways putting them together would create synergy effects and give an overall larger outcome for all involved participants.

Tasks have been formulated for **the National Support Groups** and it is suggested that the formalization must be flexible in order to fit the different contracting parties.

Status reports were given from all current Annexes.

Annex XIII (Application of Industrial heat pumps), jointly carried out between the IETS and the IEA Heat Pump Programme IA, presented a final report that was approved by the IETS EXCo.

The main success of the Annex XIV (Process integration in the iron and steel industry) was reported to be the network that has been formed. There are some plans to continue having webinars on biomass, but nothing. The Annex has produced a draft final report and guidelines which will be approved by the IETS ExCo and later published.

Annex XI (Industry-based biorefineries) presented material from an open workshop titled “On the way from Biorefineries to a Bioeconomy” and presented a possible new subtask dealing with large-scale future gasification-based biorefineries in industrial clusters combined with CCS.

The work in Annex XV (Industrial heat recovery) is divided into two phases of which the first is about

to be finalized. A draft report will be ready in the end of February 2015 and presented at a planned workshop in Copenhagen. The report will be available for anyone after approval from the ExCo. A discussion on the continuation in phase 2 is ongoing.

Annex XVI (Energy efficiency in SMEs) was supposed to finish on 31 December 2014 but due to a new participant (Denmark) and some new tasks being identified, the the ExCo approved an extension of duration until 30 June 2015.

Annex XVII (Membrane filtration for energy-efficient separation of lignocellulosic biomass components) started its work by a kick-off meeting in Lund, Sweden, in September 2014. The participating countries in the Annex are Sweden, Belgium, Denmark, Portugal and Finland.

A few **proposals for new Annexes** were presented:

A proposal for a new Annex on Heat Pumps was presented. The main goal of the new Annex is to overcome difficulties and barriers for the market introduction of industrial heat pumps. The new proposal is however not a continuation of the finished Annex but partly based on material from Annex XIII. The IETS was invited to participate in the Annex. A formal proposal will be prepared for the next IETS ExCo meeting.

An idea for an Annex on Energy-Efficient Process Control was introduced. There is already funding for the preparation work, as well as a number of identified projects. Discussions on how to adapt the proposal to the IETS programme will continue.

A new joint Annex with Demand Side Management IA was put forward. The background is a report from IEA that states that the multiple benefits of energy efficiency measures in e.g. industry can be significant. The ExCo gave its support to the idea, and the suggestion will be more closely presented later.

2015 is the 40th anniversary of the IEA. For this occasion, three persons with experience from the IETS work was appointed by the ExCo to be interviewed about the development and success

stories of the IETS: Thore Berntsson, Sweden; Jan Sandvig, Denmark, and Clemente Pedro Nunes, Portugal.

The next IETS ExCo Meeting, will be hosted by IEA in Paris, France, in May 2015.

WORKSHOP SUMMARY: "PROCESS INTEGRATION IN INDUSTRY"

As an introduction to the workshop, conclusions from the International Process Integration Jubilee Conference, held in Gothenburg in March 2013, were presented, together with a description of pinch analysis as a method. The goal is to establish a new IETS Annex on Process Integration.

The Proposal was regarded as interesting by the workshop participants who reported different reasons to get involved. It can for instance be a necessity by pressure to live up to environmental goals etc, or it could be forced by economic motivation or a way to relate to issues of energy dependency.

A discussion on how to proceed with the work on the proposed Annex was held within the IETS ExCo meeting with several positive outcomes. The next ExCo meeting will follow up on the development.