

SUMMARY OF THE 18TH IETS EXECUTIVE MEETING MAY 14-15, 2014, TRONDHEIM, NORWAY

The meeting was kindly hosted by Norway and ENOVA SF.

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

- Sangjoo Baek (KETEP, Korea)
- Thore Berntsson (Chair, Chalmers University of Technology, Sweden)
- Claus Börner (Forschungszentrum Jülich GmbH, Germany)
- Per-Åke Franck, (IETS Secretariat, observer in Annex XIII, CIT Industriell Energi, Sweden)
- Roar Grønhaug, (ENOVA AS, Norway)
- Clemente Pedro Nunes, (vice Chair, Portugal)
- Marit Sandbakk (ENOVA AS, Norway)
- Jan Sandvig Nielsen (Weel & Sandvig, Denmark)
- Patrik Thollander (Annex XVI Manager, Linköping University, Sweden)
- Emmi Voogand (IETS Secretariat, CIT Industriell Energi, Sweden)

Unfortunately, IETS member countries the Netherlands, Belgium and the U.S could not participate. There were however additional workshop participants from ENOVA AS, Norway: Andreas Krüger Enge, Lena Pedersen and Anne Merethe Kristiansen.

SUMMARY OF MEETING

Germany is a new member of the IETS. The participation of Forschungszentrum Jülich as a Contracting Party in the IETS IA became effective as of 24 April 2014.

There is a proposed cooperation coming up between the IETS IA and the GHG IA, concerning a **two-day-workshop on CCS**. It is planned to be held in Lisbon, Portugal, in March 2015.

An **Annex about LCA** is being prepared by a group in Belgium, including the Belgian IETS delegate Michel Crine. They are awaiting a decision regarding financial support from the Walloon Region. A suggestion to investigate connections between the Annex proposal and the area of interest for IEA concerning non-energy benefits was put forward.

The work on developing the proposal for an **Annex on process integration** is going well, and there is a suggestion for an Annex Manager with arranged financial support. It was decided that a formalized proposal will be presented at the next IETS ExCo meeting.

Regarding the earlier proposed **Activity on Process Control for the Use of Energy Efficient Processes**, with focus on research on industries/the industrial perspective, the Danish delegate Jan Sandvig reported to the ExCo that financial support has been secured and that the next step is to identify projects to bring into an Annex, and also to specify partners.

The Chair and Secretariat has worked together to **map countries/stakeholders that have shown interest in the IETS Annexes** and identified several countries. The Chair will report on progress in this matter on the next IETS ExCo Meeting.

To get an up-dated **overview of on-going research activities in IETS Member countries**, the Secretariat has collected input from all IETS delegates and compiled it in a matrix that gives a general picture of the fields of interest, and which of them are shared by several countries. The plan is to use the results to identify possibilities of co-operation in the form of workshops, activities or Annexes.

The discussion from the last IETS ExCo Meeting concerning **strategic development of the**

IETS was brought up by the Chair who identified five important areas of work: Sponsorship, IETS Member Country responsibilities, Workshop Activities (on IA, ExCo, Annex or Task levels), Obligations of Vice Chairs (responsibilities to report on certain issues to the ExCo at meetings, arrange 1-2 cooperative workshops per year in order to improve contacts with and dissemination to industry, other IA's etc.), and Larger, Long-standing Annexes, i.e. future possible restructure of IETS based on industry-type or technology-type oriented Annexes.

For the development of so called National Teams (on ExCo level, not in Annexes only), the Chair presented a suggestion for an IA National Team Working Programme. In short, the Working Programme suggests the National Teams to act as a support/advisory group/platform to the national delegate, and to be helpful in identifying interests, priorities, key persons, opportunities for new Annexes/activities and to distribute information. This could increase the contact surface between IETS and its member countries.

Status reports from all current Annexes were carried out. Annexes IX (Energy Efficient Separation Systems) and XIII (Industrial Heat Pumps) have been finalized and will deliver their final reports. Annex XI (Industry-based Biorefineries) reported the implementation of a new task (Membranes for Separation of Lignocellulosic Biomass Components) to which the Annex Manager will invite participants. In Annex XIV (Process Integration in the Iron and Steel Industry), the guidelines are being developed to be ready in the fall of 2014. New networks between Sweden and Australia in the Annex potentially foresee new common projects. The work in Annex XV (Industrial Excess Heat Recovery) is proceeding with participation from Sweden, Denmark, Portugal, US, Norway and Germany. However, interest has also been expressed by non-IETS members Switzerland and Italy, which the Annex Manager will follow up on. Annex XVI (Energy Efficiency in SME's) will possibly request an extension of duration due to the identification of more tasks, new IETS members becoming participants and that an opportunity has opened up for cooperation with the Electric Motor

System (EMS) Annex within the 4E (Energy Efficient End-use Equipment) IA.

A new Annex, XVII, Membrane Filtration for Energy-Efficient Separation of Lignocellulosic Biomass Components, has officially started its work this spring. Notice of acceptance from the Annex Manager Ann-Sofi Jönsson, Department of Chemical Engineering, Lund University, Sweden, was signed on 12 March 2014. A kick-off meeting in the new Annex will take place in Lund, Sweden, 11 September 2014. It is The 1st International Workshop on Membrane Filtration in Biorefineries. More information can be found at <http://iea-industry.org/ongoing-annexes/annex-xvii.html>.

For the next IETS ExCo Meeting, Swiss observer Michael Spirig invited the ExCo to Lucerne, Switzerland, on 25-26 November 2014.

WORKSHOP SUMMARY: "NATIONAL ACTIVITIES FOR IMPLEMENTATION OF NOVEL INDUSTRIAL TECHNOLOGIES AND SYSTEMS"

The expression "Valley of death" was presented as it is in some countries used to explain the difficulties of implementing new developments in e.g. industry. How can we overcome a state where nothing happens even though there has been good and promising work with R,D&D in a specific field?

There were mixed experiences as well as strategies/measures reported from the different IETS member countries on how to avoid or tackle obstacles to implement novel technologies in industry (e.g. technology procurement, demo project support, targeted policy instruments, innovation systems or applied industry programs). We have seen success stories as well as boomerang effects. The presentations made it clear that there is a difference also in how the market is viewed, and by whom; is it existing, non-existent, or predictable/predicted?

A general impression from the workshop is that sharing of experiences is not done internationally. Key people in governmental agencies need to be identified in order to have a discussion on approaches, success stories, failures etc.