SUMMARY OF THE 28TH IETS EXECUTIVE COMMITTEE MEETING 14-15 MAY 2019 IN PARIS, FRANCE

The meeting was kindly hosted by ADEME, the French Environment & Energy Management Agency.

ExCo members (delegates and/or alternate delegates) from nine member countries, one Italian observer and representatives from one sponsor organization, the IEA End-Use Working Party, the IEA Secretariat as well IETS Secretariat staff participated in the meeting.

About 50 people, including a considerable number of French stakeholders, participated in the preceding workshop on "Available Industrial Roadmaps".

SUMMARY OF THE EXCO MEETING

A large part of the IETS ExCo meeting dealt with proposals for new activities. The preparations for a new Annex, focusing on electrification in industry, and an expert workshop on deep decarbonization of the industrial sector (Vienna in October 2019) are ongoing. A proposal for a continuation of Annex XV, Industrial Excess Heat, was also put forward.

Reaching out with policy messages and dissemination of reports, information etc. as well as ways of collaborating with other TCPs were other important issues discussed at the meeting.

Status reports, including proposals for new activities were given from all current Annexes: *Annex XI* (Industry-based Biorefineries) has started the new task - "Decision Support Tools and Ex-Ante Research for Evaluating Bioeconomy Transformation Strategies", lead by the newly appointed Annex Manager Paul Stuart from Canada.

Work planned for 2019:

- Positioning of the new Task through discussions with partners, including Portugal, Sweden, Finland, and Netherlands;
- Creating of a Task Force composed of Canada, Sweden, and Portugal to rethink and renew the Annex XI vision and related activities;
- Creating a formal liaison with IEA Bioenergy Task 42;
- Planning initial activities to identify interested country experts by spring 2019, leading to the initial Task meeting planned for September 2019.

Annex XIV (Energy-efficiency in the Iron and Steel Industry) has encountered some problems during the startup of new tasks, mainly regarding getting organizations onboard and financing. However, two training courses are delivered, one of which is available online at the Vimeo platform. (Password: sapii)

Annex XV (Industrial Excess Heat Recovery) has compiled and delivered a Final Report from Task 2 for review. The report, which includes the experiences from each group together with a discussion of findings, was approved and will be published at the IETS website. A new Annex Manager, Rene Hofmann from Austria, was appointed and the proposal for Task 3, starting later this year, was approved. The scope will be bradened and include some new aspects. Task 3 subtasks:

1. Combination of methods for excess heat identification and quantification
2. Consequences for excess heat levels of future changes in industrial energy systems
3. Operational aspects in industrial energy systems
4. Opportunity and risk assessment for excess heat projects
5. Compilation of innovative excess heat projects

Annex XVI (Energy Efficiency in SMEs) is progressing well. The deliverables in the project will be the following:

- A synthesis on energy policies and programs towards industrial SMEs including an overview of policies and programs, and the

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outcome of these policies and programs. (August 2019)
- Scientific publication on energy efficiency policies for industrial SMEs (June 2019), available at MDPI Open access.

Annex XVII (Membrane processes in biorefineries) is setting up the organization for executing the included subtasks:

A. Separation in biorefineries (cont.)
B. Integration and optimization of membrane processes in biorefineries (cont.)
C. Fouling and cleaning of membranes in biorefineries (cont.)
D. Pretreatment of biomass process streams before membrane separation (new)
E. Emerging membrane processes (MD, FO, ED, VP, PV) (new)
F. Water and wastewater treatment in biorefineries (new)

Lots of organizations are joining and there is a large industry participation.

Annex XVIII (Digitalization, Artificial Intelligence and Related Technologies for Energy Efficiency and GHG Emissions Reduction in Industry) has started the first task, which will serve as a basis for following tasks. Main activities during 2019:
- April: Webinar on technical issues. Objectives: to map the emerging areas of digitalization and identify the interests of Task 1 participants as well as potential future participants, relative to tthese areas.
- June: Webinar, identifying country experts
- September: 2-day meeting, face-to-face. The objective of this meeting will be to (1) refine technical outcomes and messages and (2) identify Annex XVIII common interests and subsequent Tasks.
- December: Webinar presenting the final technical report of Task 1 and subsequent Tasks of the Annex will be confirmed.

Annex XIX (Electrification in Industry) presented a legal text for Task1 "Analysis of topics and joint interests within the area of industrial electrification", which was approved.
Suggested activities for the first year are:
- Webinar to create an overview of ongoing major activities and available roadmaps.
- Webinar to identify the framework for international cooperation, including possible connections to other TCPs.
- Workshop to identify possible contributions from all groups, to specify possible cooperation/ networking in each subtask and to agree on details for further work in Task 2.

The work plan is open to changes by the Annex Manager, when appointed, depending on practical and planning issues.

The contents of one **Topic Sheet on "Excess heat"** were approved and will be published.

The next IETS ExCo Meeting will take place in mid-November 2019, location is yet to be decided.

SUMMARY OF THE WORKSHOP: "AVAILABLE INDUSTRIAL ROADMAPS"

Industrial roadmaps from IETS member countries, including Italy (pending membership), were presented. Due to e. g. differences in industrial structure between countries and in national material and energy sources, the approach to roadmap developments differed considerably.

However, the presentations showed very clearly the high ambitions for radical GHG mitigation in the industrial sector. Some technologies were highlighted in several of the presentations, especially CCSU, electrification, biomass usage and biorefineries, as well as clustering of industries, although the views on the importance of them were different. CCSU, especially CCS, is debated in some countries as there is a question about the sustainability and risks.

Also, differences in national resources, today and possibly in the future, influence to a high extent the different roadmaps. Examples are electrification, for which possible future availability of green power is crucial, and biomass, for which the availability varies between countries. It was also clearly stated that future policy instruments, future investment possibilities and business models as well as future principles for LCA calculations will have a high influence on future opportunities for GHG mitigation.

All presentations are available for download at the IETS website.