Interactive workshop

The role of industrial biorefineries in a low-carbon economy

Tuesday 16 May 2017
The Radisson Blu Scandinavia Hotel, Gothenburg, Sweden

Workshop organized by the Technology Collaboration Programmes IEA Bioenergy and IEA IETS, and hosted by Chalmers University of Technology and the Swedish Energy Agency

Introduction/background

The transformation to a low carbon-economy requires a change in the whole system. An important contribution will be required from industry in terms of energy conservation and shifting to renewable feedstocks. Industrial biorefineries play a central role in this process towards efficient and low-carbon production systems. A clear time perspective is needed, as the societal conditions and surrounding systems for industrial production will also change. The workshop will dig into the role of industrial biorefineries in the transformation to a low-carbon economy, with a number of successful examples and interactive discussions with the audience on how such transition could be realized.
**Draft programme (version 7 April 2017)**

8.30  Registration

8.50  **Welcome and Introduction** *(5 minutes each)*
      Åsa Forsum, Swedish Energy Agency
      Thore Berntsson, Chair IEA IETS
      Kees Kwant, Chair IEA Bioenergy

9.10  **Session 1: Biorefinery developments – plenary presentations**
      **Facilitator: Isabel Cabrita, General Directorate of Energy and Geology, Portugal**
      - Future biorefinery concepts. Jussi Manninen, VTT, Finland *(20 minutes)*
      - Economic and environmental evaluation of large biorefinery concepts. Andrea Ramirez Ramirez, TU Delft, the Netherlands *(20 minutes)*
      - Infrastructure for biorefinery systems – future scenarios in oil refineries and chemical industry, and climate consequences. Henrik Thunman, Chalmers University, Sweden *(20 minutes)*
      - Industry view on worldwide biorefinery development. Johan van Doesum, DSM, the Netherlands *(20 minutes)*

      Opportunity Scouting by Creative Dialogues - Introduction to the interactive workshop (Session 2). **Erik op ten Berg, PioenConsult** *(10 minutes)*

10.40  Tea/coffee

11.10  **Session 2: interactive workshop on strategic biorefinery developments** *(90 minutes)*
       **Moderator: Erik op ten Berg, PioenConsult**
       The audience will be split up in break-out groups of around 10 people each.
       Items to be tackled:
       - Concepts for ‘optimal use’ in biorefineries in different sectors, e.g. paper industry, food industry, chemical industry, energy industry
       - Concrete short and longer term implementation opportunities
       - Business opportunities that can be implemented now. How to organize and set up these value chains?

12.40  Lunch

13.40  **Session 3: How to overcome deployment barriers for biorefineries – plenary presentations**
       **Facilitator: Rene van Ree, Wageningen UR, the Netherlands**
       - Perspectives of industrial biorefineries in the global bioeconomy – role of the policy framework to support implementation. James Philp, OECD, France *(20 minutes)*
       - Biofuel driven biorefineries in the US and deployment barriers. Jim Spaeth, US Department of Energy, United States *(20 minutes)*
- Organizing biobased industry investments. *Dirk Carrez, Biobased Industries Consortium, Belgium (20 minutes) – to be confirmed*
- From innovation to reality: realizing industrial transformation towards the circular economy. *Ed de Jong, Avantium, the Netherlands (20 minutes)*

Introduction to the second interactive workshop (Session 4). *Erik op ten Berg, PioenConsult (10 minutes)*

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| 15.40 | **Session 4: interactive workshop on deployment barriers and actions** *(80 minutes)*  
**Moderator: Erik op ten Berg, PioenConsult**  
The audience will be split up in break-out groups of around 10 people each.  
**Items to be tackled:**  
1. Main non-technical barriers and problems for industrial players to adopt and integrate biorefinery concepts  
2. How to overcome these major problems  
3. Concrete recommendations for research and industry, and for policy support |
| 17.00 | Pitch of results per group - plenary                                   |
| 17.30 | Closure of the workshop                                               |
| 17.45 | Drinks & snacks                                                       |
Practical information

Date:
Tuesday 16 May 2017, 8.30-17.45

Meeting location:
The Radisson Blu Scandinavia Hotel, Sodra Hamngatan 59, 24 Gothenburg, Sweden

Recommended hotels:
The Radisson Blu Scandinavia Hotel
STF Göteborg City Hotel, Drottninggatan 63-65, Gothenburg
Details of other options can be found at http://booking.meetx.se/en/accommodation

Participation: Invitation only. Participation is free of charge, but registration is required before Wednesday 3 May 2017 through the following link:
http://www.trippus.net/ExCoTuesday

More information:
Luc Pelkmans
Technical Coordinator IEA Bioenergy
luc.pelkmans@caprea.be
tel. +32 492 977930