

# EFCE Spotlight Talks

## Section on Energy

30 November

14:00 • 17:00  
CET

### Process integration for the energy transition in industry



*This webinar is a joint effort between IEA, IETS TCP (Industrial Energy-Related technologies and Systems Technology Collaboration Programme) and the energy section of EFCE. The main aims are to discuss the role of process integration for deep decarbonization and energy transition in industry and to identify needs for further international work.*

*Although process integration is considered a mature system approach, used in most industrial sectors globally, this powerful process design methodology will be of increasing importance for the radical structural changes in industrial energy and process systems, which are needed for radical energy efficiency measures, efficient implementation of novel technologies and systems and deep CO<sub>2</sub> emissions mitigation.*

*The webinar targets a discussion on the role of process integration for the energy transition with four keynote speakers and with a discussion session around the following four topics:*

- *New methods for process integration in the context of energy transition towards low emissions, high share of renewables and novel technologies*
- *Strategic planning of complex integrated industrial systems, taking industrial symbiosis, circular economy and future conditions into account with ex-ante based scenarios.*
- *The importance of digitalisation and databases for industrial energy system examples like the one developed in IETS Annex XV on industrial excess heat.*
- *Risks mitigation in the development and the operation of integrated industrial systems.*

#### **PROGRAM**

##### **Introduction**

Prof Thore Berntsson, chair of Industrial Energy-Related Technologies and Systems (IETS) within IEA – Sweden

Prof François Maréchal, EPFL – Switzerland; co-Chair of the Energy Section of EFCE

##### **On the role of process integration in industrial symbiosis for the energy transition**

Prof François Maréchal, Ecole Polytechnique Fédérale de Lausanne (EPFL) - Switzerland

##### **Assessing the benefits of industrial symbiosis measures in a system perspective - Case studies from Sweden**

Prof. Simon Harvey, Chalmers Univ. Technol. - Sweden

##### **Process Integration for Effective Decarbonization and Eco-efficient Industrial Processes Development**

Dr. Luciana Savulescu, CanmetENERGY, Natural Resources Canada

##### **Industrial metabolism and industrial symbiosis potential: Material & Energy Flows Analysis in a steel plant industrial complex**

Dr. Liang Dong, City University of Hong Kong

[registration](#)

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