Smart Energy Seminars: Hydrogen in existing energy systems

The Erasmus Centre for Data Analytics (ECDA) and Clean Tech Delta (CTD) invite you to the fourth edition of the smart energy seminar series. In this edition we focus on the challenges surrounding implementation of hydrogen into existing energy systems.

The seminar series provides a platform for the research, public, and private sector to discuss economic, social, and technological issues around Energy Decarbonization, Decentralization and Digitization (E3D).

Our academic and industrial guest speakers are:

- **Institute of Energy Economics at the University of Cologne** – David Schlund
- **Witteveen+Bos** – Raphaël van der Velde
- **Stedin Group** – Amy van Groot Battavé

Time: 28 September 2021, 15:00 – 17:00
Location: Digital meeting (the link will be sent to the registered participants)

For registration, please sign up via the registration form.
For further questions, please contact Ivo Carels (i.carels@cleantechdelta.nl).

Presentations

Institute of Energy Economics at the University of Cologne (EWI) – In this presentation David Schlund will give an overview of the economics of hydrogen and dive into recently published results. Three topics will be covered. Firstly, an overview of the hydrogen supply chain, corresponding stakeholders and their perceived chances and risks. Then, a cost comparison of low-carbon hydrogen production technologies Finally, governmental instruments to promote clean hydrogen production and utilization are introduced and discussed.

David Schlund is a research associate at EWI and PhD student at the University of Cologne, focusing on different topics around the development of a hydrogen market.

Witteveen+Bos – "Hydrogen in reality, from a system integrator perspective". Witteveen+Bos is a consultancy and engineering company active in many sectors, one of them is the energy sector. The energy transition is a topic that involves us all. That's why we have developed a hydrogen project that involves collaboration through the entire chain: we believe that together we can have more impact in accelerating the energy transition. As a system integrator, we have developed the hydrogen project GROHW. In this presentation we will share with you its ambitions, but also some of the lessons we learned in our quest towards realisation.

Raphaël van der Velde is the project leader of GROHW. Raphaël has worked in the field of Energy Engineering, Water Supply and Water Reclamation since he graduated in 1991 and is currently involved in energy efficiency studies, industrial waste heat utilisation, large scale energy storage, hydrogen and water quality based geothermal design.

Stedin Group - Stedin Group is the parent company to the third largest electricity and gas distribution grid operator in the Netherlands. Following CO_2 emission reduction ambitions, the Dutch government has decided to phase out natural gas as an energy carrier in the built environment by the year 2050. This presentation will address the potential of hydrogen as an energy carrier for this sector, as well as the challenges faced by grid operators because of integration of hydrogen into the energy system.

This presentation is given by Amy van Groot Battavé, a strategy consultant at Stedin Group. In this role, she was responsible for Stedin Group's position papers on the potential of hydrogen in the built environment and the integration of renewable gasses in a future energy system.