

GREEN HYDROGEN – TRENDS AND DEVELOPMENTS - PROGRAMME -

WEBINAR
SERIES

CONCEPT TIME

Digital lecture series with hydrogen experts
January 2022 to April 2022
every Wednesday (7.00 to 8.30 pm CET)

LANGUAGE MEDIUM

English
Free participation via livestream (YouTube)

HOSTED BY

TUHH
Technische
Universität
Hamburg



Hamburger
Bezirksverein



REGISTRATION

To receive the livestream link for the webinar series,
please fill in the registration form at:
<https://www.tuhh.de/ieue/greenhydrogen.html>

INTRODUCTION

12.01.2021 | Opening event

1. Hydrogen in the future energy system - Possibilities and constraints //
2. Technologies for supply and utilisation of hydrogen

SECTION I | Production of green hydrogen

19.01.2022 | Established electrolysis technologies

1. Proton Exchange Membrane Electrolysis (PEMEL) //
2. Alkaline Electrolysis (AEL)

26.01.2022 | Innovative electrolysis technologies

1. Anion Exchange Membrane Electrolysis (AEMEL) //
2. Solide Oxide Electrolysis (SOEL)

02.02.2022 | Approaches in coupling renewable energies with hydrogen production

1. Coupling with offshore wind energy //
2. Coupling with solar energy

SECTION II | Transport and storage of hydrogen

09.02.2022 | Gaseous hydrogen

1. Large-scale underground hydrogen storage //
2. Transportation via pipelines

16.02.2022 | Liquid hydrogen

1. Liquefaction, storage and regasification //
2. Transportation of liquid hydrogen via ship

23.02.2022 | Liquid hydrogen carrier

1. LOHCs //
2. Methanol

02.03.2022 | Hydrogen as a feedstock for PTL fuels

1. Large Scale Production of Fischer-Tropsch Fuels //
2. Small Scale Production of Fischer-Tropsch Fuels

09.03.2022 | Ammonia as a potential hydrogen carrier

1. Synthesis of Ammonia //
2. Redissolution of hydrogen from ammonia

SECTION III | Applications

16.03.2022 | Development of a hydrogen infrastructure in the public space

1. Ramp-up of the hydrogen infrastructure for heavy-duty vehicles in Germany
2. Hydrogen refuelling stations for heavy-duty vehicles between Germany and Norway

23.03.2022 | Development and production of hydrogen driven heavy-duty vehicles

1. Hydrogen driven waste collection vehicles //
2. Hydrogen driven heavy duty trucks

30.03.2022 | Hydrogen-based technologies for climate-neutral industry

1. Direct Reduction of Iron (DRI) - The key to climate-neutral steel production?
2. Use of (green) hydrogen in refinery processes
3. Integration of hydrogen into production processes at industrial sites

WRAP UP

06.04.2021 | Final event

1. Concepts for the integration of hydrogen into the energy system //
2. Possible market ramp-up for the hydrogen economy

STATUS:
10.12.2021