

# 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://forms.gle/jLqd49Pnt9D4cuXw7>

## 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