

# GAME CHANGER HYDROGEN - POTENTIAL FOR THE ENERGY INDUSTRY

## SEMINAR, 1 DAY

For a long time, hydrogen had a shadowy existence, being labelled as "in the research stage" or "too expensive". Now, European governments consider the potential of hydrogen to be high and have developed strategies to develop the market in sub-sectors of the H2 value chain. Germany wants to become the world market leader in sub-sectors of the new industry. The live online training conveys the relevant contexts of the hydrogen economy and its interfaces to the electricity and gas economy. Costs and price influences as well as the hydrogen potential will be analysed and funding instruments that could help build the hydrogen economy will be discussed.

## Your contents

### The value chain of the hydrogen economy

- Definitions of different types of hydrogen
- The value chain in detail: production, transport, storage, use
- Assessing the sustainability of hydrogen: sources, own production vs. imports, situation of exporting countries
- Extended value chains: areas of application for other synthetic gases

### Cost structures and price influences in the hydrogen economy

- Electricity procurement for power-to-gas applications (including markets, prices, price hedging)
- Generation costs for hydrogen: is there a world market or world market price?
- Importance of CO2 abatement costs for H2 price development
- Scenario assumptions and results of a possible hydrogen economy

### Potential hydrogen demand

- Meta-analysis of different demand scenarios (e.g. global, national, sector-specific)
- Derivation of possible domestic market ramp-up and import volumes
- Classification of the German government's hydrogen strategy
- Hydrogen as an energy storage option for the cold dark period

### Political funding instruments for the hydrogen economy

- Presentation of various political promotion instruments, including performance- or volume-based tenders, quota system for hydrogen applications, Carbon Contracts for Difference (CCfD), individualisation of additional electricity costs
- Classification and assessment of the effects of the promotion instruments
- Examples of support instruments from other countries



## TARGET GROUP

- Employees in strategic management in industry (chemicals, steel, petrochemicals)
- Business development staff in the transport and logistics sector
- Professionals from the public services sector (utilities, etc.) with responsibility for product or business development
- Expert speakers from politics and interest groups

## YOUR BENEFITS

After this seminar you will be able to:

- describe the hydrogen value chain and define your own role in it,
- evaluate cost developments and price influences on hydrogen prices,
- estimate the expected dimensions of the hydrogen economy,
- classify and assess political support instruments.

Supplement your market knowledge with the seminars **Basics of the Energy Industry** or **Trends in Electricity Price Development**.