

The indispensable role of low-emissions Hydrogen in the chemicals industry

Green hydrogen is widely recognized as a cornerstone for decarbonizing hard-to-abate sectors, yet its market development faces persistent challenges. Despite ambitious policy targets, uptake remains limited due to high costs, infrastructure gaps, and uncertain demand. This session will present an analysis of the hydrogen ecosystem, focusing on why firm offtake agreements are scarce and how this impacts investment and deployment.

We will explore sector-specific dynamics—refining, chemicals, steel, and transport—highlighting where hydrogen offers the greatest value and where barriers remain. We'll delve deeper into cost trends, regional competitiveness, and the role of policy frameworks in shaping demand. The discussion will also address emerging opportunities such as synthetic fuels and industrial heat applications.

The aim is to understand the realities behind the hydrogen transition, the interplay between technology, economics, and regulation, and the strategies needed to accelerate adoption.

Key Takeaways

- Understand why hydrogen uptake lags despite ambitious targets.
- Explore cost dynamics and competitiveness across regions.
- Identify policy levers and infrastructure priorities.
- Discover emerging opportunities in industrial and transport sectors.