

Carbon Capture and Hydrogen Plants - Overcoming Challenges and Optimizing Integration

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Abstract

Carbon capture technology and the hydrogen economy have become essential for achieving the ambitious sustainability goals of governments and industries. This presentation will address the various challenges these sectors face today, emphasizing the critical need to tackle these issues to ensure economic and sustainable operations. Key barriers and challenges related to both industries will be identified, along with strategies to overcome them.

We will uncover the key points to consider when designing, simulating, automating and operating these types of plants to ensure their optimal performance.

Additionally, we will highlight the importance of integrating and optimizing the operations of various plants within the entire ecosystem, such as carbon capture, hydrogen production, and other power-to-X technologies. By examining these integration strategies, we aim to provide a comprehensive roadmap for enhancing efficiency and effectiveness in the sector.