

## **Transitioning to Clean Energy: Challenges, Opportunities, and Pathways for 2070**

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### **Abstract**

The global shift towards renewable energy is imperative to meet the rising power demands while addressing the urgent need to reduce carbon emissions. This expert talk will explore the current landscape of renewable energy, highlighting the challenges of meeting today's power requirements with sustainable solutions. As countries worldwide aim for ambitious targets like achieving complete clean energy by 2070, it is crucial to understand the role of renewable energy conversion systems, including solar, wind, and bioenergy technologies. This session will delve into the technological advancements in renewable energy, emphasizing their implementation across various industries such as manufacturing, agriculture, and transportation. By examining successful case studies and innovative applications, this talk aims to inspire and equip participants with the knowledge needed to overcome barriers and drive the transition towards a clean and sustainable energy future, aligning with global carbon neutrality goals.