California Energy Grid Has Gone Green – But is That Enough to Meet the Needs of a Warming California

By Angelina Galiteva, CEO, Alliance for Renewable Clean Hydrogen Energy Systems (ARCHES), Chairperson, California Independent System Operator, Renewable Energy Grid Management and Clean Tech Policy and Regulatory Expert, US Department of State

https://calbizjournal.com/california-energy-grid-has-gone-green-but-is-that-enough-to-meet-the-nee ds-of-a-warming-california/

Background: California is the first state in the nation to receive funding for Hydrogen Hubs from the Inflation Reduction Act of 2023. The \$1.3 Billion will help jumpstart the next generation of clean energy production in the U.S. Leading the way is California which has made significant strides toward a clean energy future, with renewable sources meeting 100% of the state's energy demand for 97 out of 115 days this year. This achievement highlights the state's commitment to building a resilient and sustainable energy grid. However, as California continues to address climate change and strives for a carbon-neutral economy, renewable hydrogen emerges as a critical component for achieving economy-wide decarbonization. The challenge now is to institutionalize hydrogen as a central element of California's green energy transition to meet ambitious climate goals and support economic growth.

The Challenge: While California has successfully expanded its renewable energy infrastructure, there remains a crucial gap in its ability to fully decarbonize all sectors of the economy. Renewable hydrogen offers a promising solution, particularly for areas difficult to electrify, such as heavy-duty trucking and high-heat industrial processes. The challenge is to ensure that hydrogen development and deployment are scaled up effectively to complement existing renewable resources and meet the state's aggressive clean energy targets. Additionally, securing adequate federal and state support and making strategic investments in hydrogen infrastructure are vital for maintaining California's leadership in green energy.

Our Approach: JCI's approach involved highlighting the importance of renewable hydrogen in California's clean energy strategy through a comprehensive op-ed by Angelina Galiteva. The op-ed underscores the state's achievements in renewable energy while making the case for hydrogen as an essential component for achieving full decarbonization. We emphasized California's recent federal funding success and the strategic role of ARCHES in advancing hydrogen technology. By articulating the benefits of renewable hydrogen and the need for continued investment, the op-ed aimed to galvanize support from policymakers, stakeholders, and the public.

Our Results: Statewide Opinion Piece - Framing the Issue. The op-ed, published on February 1, 2024, has sparked a vital discussion on the future of California's energy grid and the role of renewable hydrogen in achieving the state's climate goals. It has attracted attention from key stakeholders, including policymakers and industry leaders, and has been widely shared across media platforms and social networks. The op-ed has contributed to increased awareness and advocacy for hydrogen as a cornerstone of California's green energy future, reinforcing the urgency of smart policy choices and investments to support the state's transition to a carbon-neutral economy.