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IEPR Commissioner Workshop on the Potential Growth of Hydrogen

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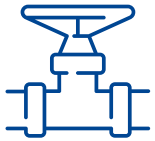
Clean Fuels Studies: **Key Takeaways**

The Clean Fuels Study and Reliability Analysis underscore the need for a diverse energy system and thoughtful, near-term investment in clean fuels infrastructure

CLEAN FUELS STUDY

Combining the strengths of renewable electricity and clean fuels can be the most affordable and resilient path to net-zero



Infrastructure that transports clean fuels and captured carbon could become essential for affordably meeting California's climate goals

RELIABILITY ANALYSIS

Resource diversity and dispatchable generation powered by clean fuels could be vital for electric reliability

Clean fuels investments to support the electric sector can catalyze clean fuels adoption in hard-to-abate areas

Stakeholders must act faster and with greater collaboration to expand and accelerate the deployment of decarbonization tools, including the clean fuels initiatives already underway

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Reliability Analysis:
Policy Recommendations

California should accelerate clean fuels infrastructure deployment to enable access to clean fuels for customers, including hard-to-abate sectors

1. The State should prioritize rapid deployment of clean, dispatchable generation, especially clean hydrogen resources.

2. The gas system needs a rigorous, integrated planning process that factors in the impacts of climate change and evolving policy and customer needs.

3. To support future energy needs, immediate investment in clean fuels infrastructure is necessary now.

Clean hydrogen pathways can support emission reductions for:

Electric Generation

Industry

Aviation

Heavy-Duty Transportation

Ports + Ocean-Going Vessels

Electric sector demand for clean fuels can catalyze adoption in other sectors by contributing to the build-out of shared clean fuels infrastructure.

As demand for clean fuels grows, efficiencies gained by increasing infrastructure utilization and falling marginal production costs for clean fuels could benefit multiple areas of the economy.

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Proposed Clean Renewable Hydrogen **Pipeline System**

Benefits

- Could significantly **reduce greenhouse gas emissions** from hard-to-electrify sectors and **improve air quality** in the Los Angeles region.
- Could convert up to **four natural gas power plants** to clean renewable hydrogen
- Could displace up to **3 million gallons of diesel per day** reducing NOx, $PM_{2.5}$ and other hazardous air pollutants associated with diesel emissions.