University of California, Irvine

Developing a Clean Fuels Network

Hydrogen Blending is Key to California's Clean Energy Goals

At the direction of the California Public Utilities Commission, SoCalGas is proposing a local demonstration project that could safely blend up to 20% clean, renewable hydrogen into the natural gas system in an isolated portion of the University of California, Irvine (UCI) campus.

To support California's climate goals, SoCalGas is proposing a hydrogen blending demonstration project at UCI's Anteater Recreation Center (ARC). This project will blend clean, renewable hydrogen into a portion of UCI's natural gas system and offer a real-world environment to better understand how clean hydrogen and natural gas can be safely delivered to customers in the future. This is part of a broader effort by California and utilities to develop a standard for safe hydrogen blending, which could reduce greenhouse gas emissions. The data gathered from this demonstration can also help assess how to speed the development and deployment of related advanced technologies key to the state's climate goals.
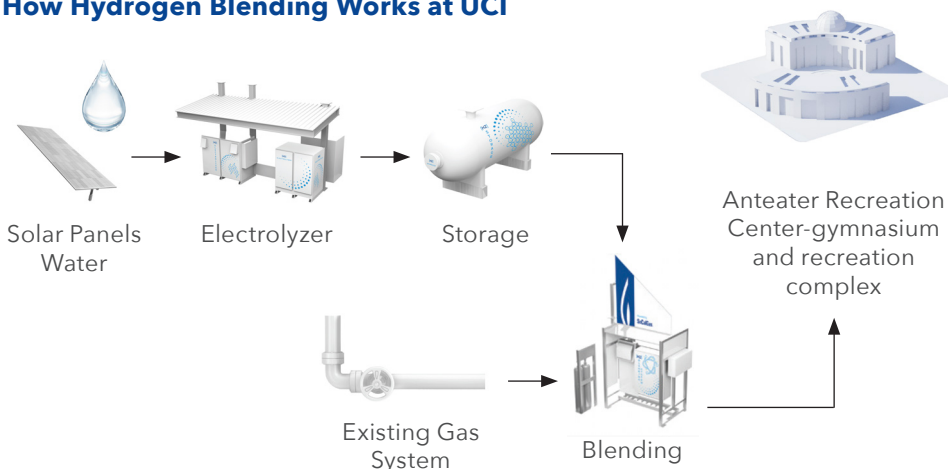
What is Hydrogen Blending?

It is the process of blending hydrogen into natural gas and injecting it into the natural gas infrastructure.

Proposed Project Overview:

» Project will begin demonstrating a 5% blend, gradually increasing up to 20% into SoCalGas's infrastructure that will serve the ARC at UCI.

» The hydrogen blend will be used for light commercial equipment.

» Active blending expected to last approximately 18 months on the campus.

Hydrogen Blending is Proven and Safe

Hydrogen is safely and reliably utilized around the world and has been for decades in countries like Belgium, Canada, Denmark, France, Germany, Italy and the United Kingdom. Hawaii Gas has also been using hydrogen in its fuel mix for a half-century.

SoCalGas will employ extensive safety measures that include leak surveys and detection technology, safety assessments of hydrogen storage and components, end-use equipment surveys, education and training.

Up to **20%** underway in Europe

Up to **15%** in Hawaii

Up to **5%** underway in continental United States

5% underway in Canada

Up to **10%** underway in Australia

How Hydrogen Blending Works at UCI

Solar Panels Water → Electrolyzer → Storage → Blending ← Existing Gas System → Anteater Recreation Center-gymnasium and recreation complex

For more information, visit: **socalgas.com/H2Blending**