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Thought you might be interested in this new **Power to Gas** (P2G) story in the energy trade press last week:

power –
technology News, views and contacts from the global Power industry

New research shows power-to-gas technology increases use of renewable energy

> ***New research on power-to-gas technology has demonstrated the technique is capable of significantly increasing the use of renewable energy.***
>
> *This technology converts excess renewable energy to hydrogen before mixing it with natural gas. The product of this process can be used to provide electricity to everything from home appliances to power plants.*
>
> *Funded by Southern California Gas Company (SoCalGas), the ongoing research is conducted at the University of California in the US. Researchers studied the data from the UCI campus micro grid, which is integrated with solar panels capable of generating approximately 4MW of peak power.*
>
> *Simulations demonstrated that by storing excess solar energy on sunny days and using an electrolyze to generate renewable hydrogen, the UCI campus micro grid could support an additional 30MW of solar panels. With increased deployment, renewable energy used on the campus grew from 3.5% to 35%.*
>
> *UCI Mechanical & Aerospace Engineering and Civil & Environmental Engineering associate professor and Advanced Power & Energy Programmed (APEP) associate director Jack Brower said:*
>
> ***"The ability to increase the mix of renewables on campus by tenfold is truly significant."***
>
> *"With power-to-gas technology, you don't need to stop renewable power generation when demand is low. Instead, the excess electricity can be used to make hydrogen that can be integrated into existing natural gas pipeline infrastructure and stored for later use.*
>
> *"The SoCalGas system alone is made up of over 100,000 miles of pipeline. This study suggests that we could leverage that installed infrastructure for storage and significantly increase the amount of renewable power generation deployed in California."*
>
> ***With a blend of 5% renewable hydrogen in SoCalGas' natural gas system, the new technology will provide storage capacity equivalent to $130bn worth of battery systems.***
>
> *In addition, renewable hydrogen can be used in fuel cell vehicles or converted to methane to be used in a natural gas pipeline and storage system.*

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