

Colorado Hydrogen Network



An initiative of



Newsletter - August 2020

Upcoming Events & Announcements

August Monthly Meeting

All who are interested in hydrogen are encouraged to attend. The August Membership Meeting will take place via Zoom. You may follow the link below for access.



Tuesday, August 18th
3:30 - 5:00 p.m. MDT

<https://zoom.us/j/4212771558>



Help Us Build Hydrogen Fuel Stations!

Electrify America is evaluating the merits of investing in hydrogen infrastructure as part of their [Cycle 3 Investment Planning](#). The Colorado Hydrogen Network is submitting a concept proposal requesting investment for five hydrogen fueling stations, due August 14th. More details at our Monthly Meeting on August 18th.

In order for these five stations to create an immediate Return on Investment, we need significant hydrogen sales to commercial or fleet users (in addition to passenger vehicles).

We need everyone's help finding businesses or municipalities willing to deploy medium- or heavy-duty Fuel Cell Vehicles. The stations and vehicles would deploy concurrently. Please send us your suggestions of businesses to contact to brian.debruine@gmail.com

Webinars

CHN is presenting a series of free webinars in collaboration with [Colorado Cleantech Industries Association](#), [Denver Metro Clean Cities](#) and the [Colorado Energy Research Collaboratory](#).

August 20: The Role of Electric Utilities & Hydrogen Generation in the Energy Transition
10:00 - 11:00 a.m. MDT.

Register [here](#)



Colorado Energy Research Collaboratory
Securing a Sustainable & Resilient Energy Future

New Members



The [Colorado Energy Office](#) aims to reduce greenhouse gas emissions and consumer energy costs by advancing clean energy, energy efficiency, and zero emission vehicles. The Colorado Energy Office joins our membership as a Government Collaborator. The CEO is developing a Colorado Hydrogen Roadmap and studying a Low-Carbon Fuel Standard for Colorado.



HydroCosm.

[HydroCosm](#) provides a green hydrogen fuel solution for municipal, industrial and irrigation water operators. The Company's systems recover clean energy from excess pressure within existing solid pipe water infrastructure to power electrolysis and local hydrogen fuel production including dispensers for Fuel Cell Electric Vehicles (FCEVs).



green hydrogen market development.

The [Green Hydrogen Coalition](#) (GHC) is an educational non-profit organization. The GHC focuses on building top-down momentum for scalable green hydrogen projects that leverage multi-sector opportunities to simultaneously scale supply and demand. CHN and GHC have developed a formal collaboration channel to accelerate progress for

Activities and Outreach

Networking

Western States Hydrogen Coordination - Motivated by the need to address the inclusion of Fuel Cell EV's in the Western Governors' Association "Electric Vehicles Roadmap for the West", we contacted the groups below. With significant help from the Green Hydrogen Coalition, the first coordination telecon took place August 10th.



DENVER
THE MILE HIGH CITY





Floating PV - CHN connected with Littleton-based company that builds floating Photo Voltaic panels. Unused bodies of water are ideal for PV since the water keeps PV panels cool, increasing their efficiency. Walter is looking to use curtailed solar power to generate hydrogen.

Micro Hydro Energy - CHN connected with Micro Hydro Energy, based out of Montrose, CO. They fabricate and install micro-hydroelectric generators in streams and plumbed systems in Colorado, Utah and Wyoming. Micro-hydro systems may be a useful way to provide power to electrolyzers in remote locations where the electric grid is inadequate. CHN connected MHE with Hydrocosm to explore possible collaboration.

Activities

CHN actively continues to both recruit new members as well as officially register existing CCIA members as CHN members. Recruiting Advisory Board members has been on-hold but will now resume.

News



The *HydrogenNowCast* is devoted to encouraging the deployment of Fuel Cell EV's, hydrogen fueling, and hydrogen infrastructure throughout the world.

CHN has released 6 episodes of the *HydrogenNowCast* and the show has achieved 463 downloads to date.

The HydrogenNowCast is available on:

[Apple Podcasts](#) | [Stitcher](#) | [Spotify](#) | [Google Podcasts](#) | [iHeart Radio](#)

[Batteries and hydrogen should be seen as partners instead of rivals.](#) A concise, objective, and scientific comparison of the benefits to each type of EV by Dr. Gareth Hinds from the UK National Physical Laboratory (NPL).

[Microsoft commits to H2 as an energy-transition fuel with senior role in Hydrogen Council.](#) The technology giant plans to make renewable hydrogen a key part of its plans to become carbon negative by 2030, while green H2 is also expected to win financing from the company's \$1B Climate Innovation Fund. Ten other companies also joined the [Hydrogen Council](#) at the same time as Microsoft, increasing its membership to 92 businesses.

[ANU team pushes forward the efficiency of solar-to-hydrogen production.](#) Australian National University (ANU) researchers have managed to push forward the efficiency of solar-to-hydrogen production that bypasses electrolyzers and avoids AC/DC power conversion and transmission losses. They have recently managed to reach 17.6% efficiency, achieved with [perovskite](#)-silicon tandem absorbers. The photoelectrochemical process, in bypassing the electrolyzer step of envisaged large-scale green hydrogen

production, and its attendant limiting cost factor, shows the ANU team's work to be a potential game changer in the race to produce commercially viable hydrogen. (Editor's Note: In contrast, solar cells plus an electrolyzer are probably less than 10% efficient.)

Thierry LEPERCQ

Hydrogen
is the New Oil



How 7 energy battles are giving birth
to a carbon-free world

Book: [*Hydrogen is the New Oil*](#) by Thierry Lepercq. This book gives a really good perspective on the current lay-of-the-land in energy – from petroleum to renewables. “Peak Oil” is no longer a marker of the decline of supply, but rather the decline of *demand*. Thierry is on the Board of our newest organizational member, the [Green Hydrogen Coalition](#).

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