



DESTINATION STARTUP

New Day Hydrogen, LLC

One-Sentence Summary of What You Do: New Day Hydrogen, LLC, provides hydrogen fueling for fleets and transit to help them achieve decarbonization goals without compromising operational efficiency.

Affiliated Institution: Colorado State University

Have you formed a company yet? Yes

Funding/Financing: Angel Funding (including Self or Friends/Family)

Please describe your company and the problem you are trying to solve: NDH is a technology integrator providing hydrogen fueling as a service (HFaaS) to customer partners who recognize the imperative to decarbonize their fleets, but who cannot accept the limitations of battery electric vehicles (BEVs). Specifically, the combination of charging time and infrastructure challenge precludes BEVs from full adoption across many fleets who operate in variable conditions of range, temperature, and load. Simply put, BEVs require a radical shift in user behavior and expectations – and therefore cannot represent the sole path to rapid decarbonization. In response, fuel cell electric vehicles (FCEVs) and hydrogen fueling offer a complementary approach to zero-emissions transportation that can reach markets poorly served by BEVs including: 1) heavy duty-cycle fleet vehicles, 2) transit authorities and rural communities with long driving distances, and 3) land-locked or densely populated areas where access to devoted chargers proves challenging. Notably, hydrogen fueling in urban settings would enable underserved communities to participate more directly in decarbonization of the transportation sector. And ultimately, deploying FCEVs and hydrogen fueling alongside BEVs and chargers would provide the greatest flexibility and consumer choice in the market – a strategy that historically has proved most successful for rapid adoption of new technologies in the US.

What is/was your go-to-market strategy? Although NDH sees future opportunities in passenger vehicles, its immediate attention focuses on fueling fleets and transit via modular, electrolysis-based stations that produce zero-emissions hydrogen on site. This decision enables NDH to scale projects in line with demand from customer partners. NDH has spoken with numerous fleet owners and transit authorities and has consequently developed emerging partnerships with fleets in roadside assistance, transit support, and the ski industry. Such operators appreciate the imperative to decarbonize, yet are poor candidates for batteries mostly due to the down-time required for charging. In contrast, FCEVs have fuel tanks that can be refilled in minutes rather than battery banks recharged over hours – and therefore offer fleet operators a familiar experience to today's gasoline or diesel fueling. As validation for this approach, NDH has executed an MOU with AAA/The Auto Club to provide hydrogen fueling at AAA's main depot in Centennial, CO.



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How will/do you generate revenue? NDH makes money by providing fueling to fleets running vehicles off hydrogen. In general, these fleets will pay for hydrogen through a combination of direct charges for fuel consumption and a monthly a subscriber fee to support fueling infrastructure. By scaling projects to match emerging demand, NDH demonstrates attractive financials and efficient capital deployment for its projects. Utilizing a conservative approach, NDH's model assumes no debt and only modest government incentives, both of which would clearly be pursued to improve financial efficiency.

How will this showcase benefit your company or technology? We look forward to presenting and to receiving constructive feedback as we prepare for Destination Startup. Further, we anticipate meeting with investors who share our enthusiasm for building out this ground-floor opportunity in hydrogen fueling. Specifically, we seek funding for our next phase of development which will include: completing design work for our upcoming project with AAA, implementing that project, growing our team, and increasing our project pipeline.

Who are the members of your team and why is this the right team to get the job done?

- CEO Seth Terry is a technology originator and co-founder of Nutrinsic, a manufacturer of alternative, microbial protein from process waters at food and beverage manufacturers. He served as an executive through Nutrinsic's C round before the company's purchase by iCell Sustainable Nutrition in 2016 and has since worked in renewable energy and IoT collection of energy efficiency data at the grid edge.
- CCO Patty Kelley leads NDH's business development efforts and is responsible for building out the company's project pipeline. In addition, she crafts agreements for fleet partners and provides public outreach related to government incentive programs for hydrogen while also graciously serving as NDH's in-house legal counsel.
- CTO Brian DeBruine is considered a thought-leader in hydrogen, having founded the Colorado Hydrogen Network after completing a career in electrical engineering at Honeywell. Additionally, Brian produces a biweekly hydrogen podcast with a global following and helped CSU acquire a donated hydrogen fueling station at their Energy Institute.
- COO Buford Barr has led engineering and project development teams throughout his career in the energy industry. At NDH, he enhances relationships with fleet and transit customers while also compiling an inventory of detailed site analyses for projects entering the company's growing project pipeline.
- Beyond its full-time team, NDH receives advisory strategic input from Deutche Cleantech's Charles Pardue and Innosphere's Mark Gorham; marketing services from Jim Fouch; and engineering from EPC, LLC.